

Repairs Needed ASAP

Pheasant Farm - West dike

Goose Pen - East dike

316 yd apart

Water Levels

2009

MS ditch

- Pump on 4/29 - d.d. ditch for Gaugher
Dam Removal

BOSS

- ~~BOSS~~ - check water + possibly
set up meeting w/
Farmer

- Pull boards from Rail unit on
South side

gh

- Goosepen - Open
- Pool 2C - Open
- Pool 2A - pumping 2.4 goal
for end of this week

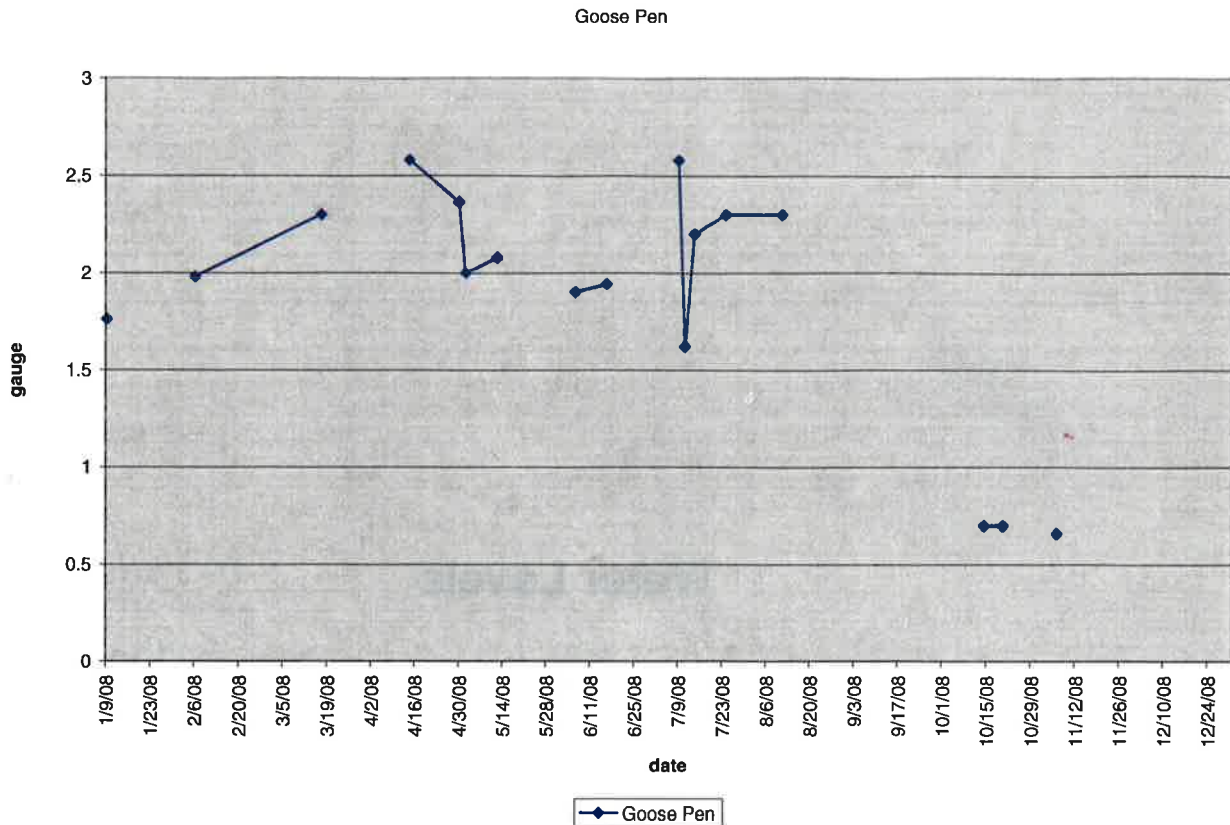
- Pool 9 Borrow - 2.0 goal
Open

- Ask Pat about Woodies + Metz.
 - when is he getting H₂O off
 - Why isn't Metzger open? B/c of N winds?

Unit: Goose Pen

Acres: 57

2008 Activity: Unit was at full pool in February. High water in the ditch wouldn't allow high water in the unit to escape. High water was finally let out in April and again in July.



Unit Goal: Provide foraging and resting habitat for migratory birds.

Objectives: Control exotic flowering rush and purple loosestrife. Encourage more desirable vegetation. Put in a rotation for fall shorebird habitat.

Strategies:

Maintain full pool and monitor Purple loosestrife.

Management Strategy Constraints: The east dike is in bad shape. There is a French drain under the road that goes to the check station that allows the ditch next to Magee's entrance road and shop to drain. When the unit is too high, water backs up and threatens the Magee shop/garage. The culvert under our entrance road is too small and water backs up in the drainage ditch and floods Magee's entrance road and prevents Goosepen from draining.

Unit: **Goose Pen:** 2.0 is full pool (1' free board on east dike - dike in bad shape)

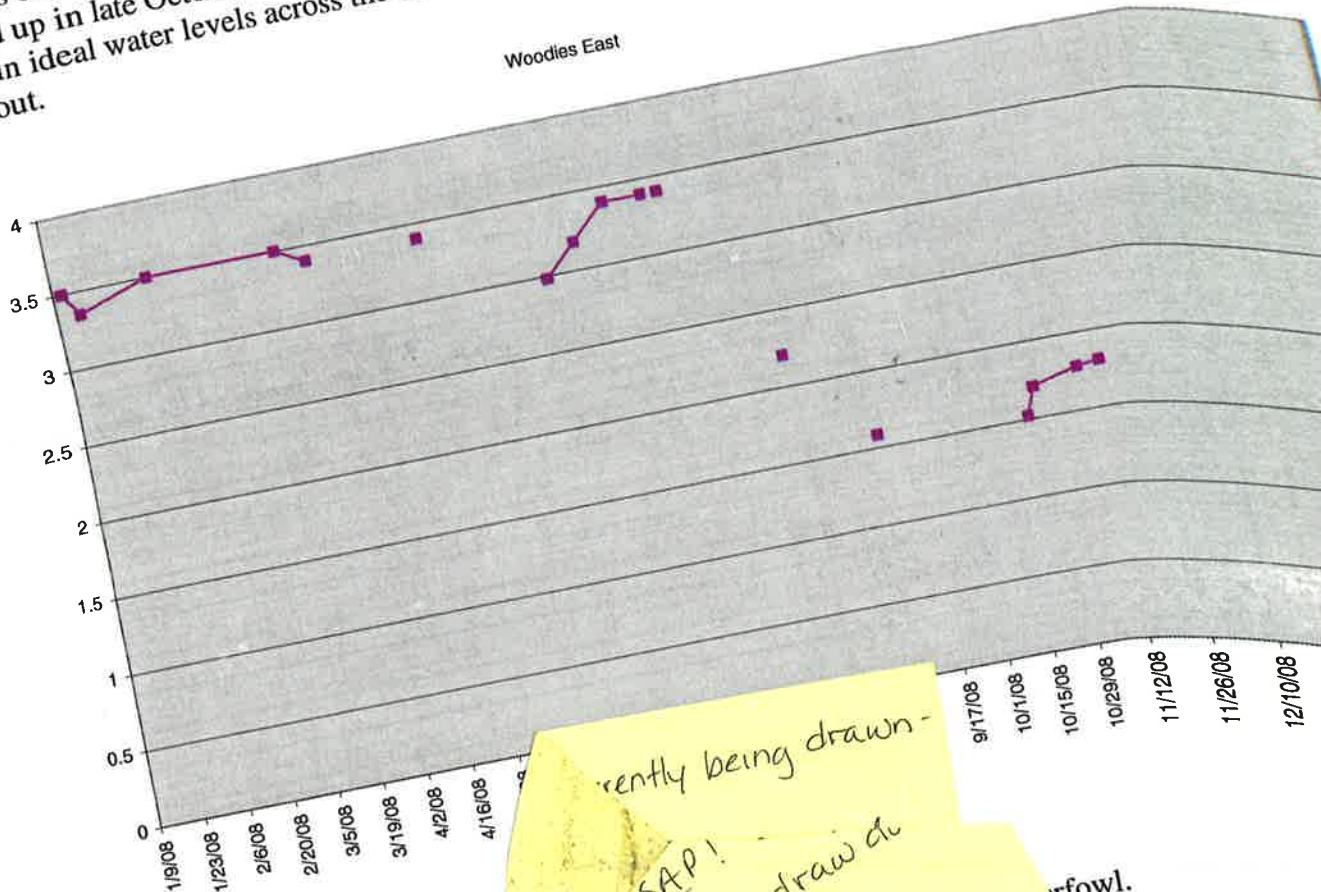
Water level guide	2009 Date	Actual Water level	Notes
	Jan. 15	1.30	
	Feb. 12	1.70	
	26	1.70	
2.0	Mar. 3	1.78	
1.80	9	1.96	Watch Radar ditch - may need to set up pump in ditch to increase drainage to lake - opened
	11	1.90	Closed 3pm - equal w/ lake level
	18	1.86	30 1.82
	Apr. 22	1.96	Opened 9:30
	27	1.50	Closed 29 - 1.56 - 9:30 am Opened all the way - adding H ₂ O (NE wind)
	May 19	1.46	
	June 2	1.42	
	9	1.3	
	19	1.25	
	26	1.4?	Green Scum!
	July 17	0.98	
	28	0.99	Green!
	Aug. 4	0.9	
	10	0.88	
	21	0.73?	Dirty Motor
	31	0.70	
	Sept. 16	0.48	Opened to lake - high wind SENE - Good shorebird use
	17	0.68	Closed
	Oct. 20	0.50	
	26	0.52	
	Nov.		
	Dec. 7	0.50	ice.

7.64
6.42
- 1.22
2.6 = 6.92
2.66
+ 1.22
1.38
- 1.14
= 24 OFF

Unit: Woodies Roost East

Acres:

2008 Activity: Management activities/constraints prevented ability to take high water off in March or April. At some time in May, I believe Magee let some high water out. This was done again in July and required the state to use their main pump. The unit was pumped up in late October with a Thompson and this was done multiple times to maintain ideal water levels across the unit. The gate to the ditch on the north was leaking water out.



Unit Goals: Provide foraging

Objectives: Manage for hem.

Strategies: Divider dike scheduled construction.

Potential Problems: Beaver, leaking gate on north side, coordinating management with Magee's activities may require timing adjustments.

currently being drawn -

*SAP!

Pool 2A - monitor draw du

7A+B - If water gets below 3.5, turn pump on. maintain 3.5 at least!

rflowl.

own depending on

Unit: **Woodies Roost East** – May need to adjust water levels based on construction and leaks.

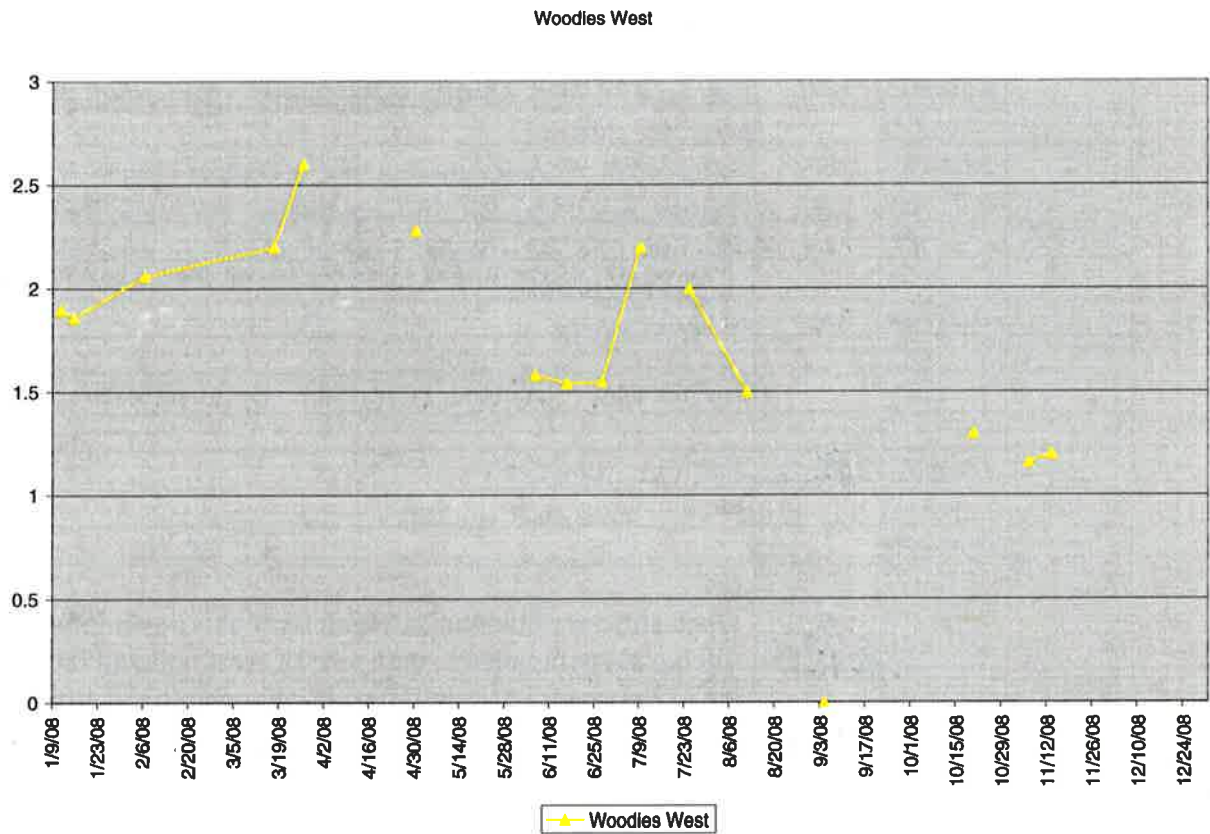
Bottom of gauge is 1.10 - set at bottom of unit (not ditch)

Water level guide	2009 Date	Actual Water level	Notes
	Jan. 5	2.84	
	Feb. 26	73.4	Overboard - 3 holes showing in fence post - Pat opened to let H ₂ O out
	27		Structure closed
	Mar. 3	73.4	Overboard - 4 1/2 holes showing + 1" of board (about 4" decrease in H ₂ O)
	6	3.1	Probably opened on 3/5. Still open 10am. Will close ^{since 2/26/09} in p.m.
2.7-3.0	18	>3.4	ditch that runs E-W on the S side of Wood W. is out of banks in field @ 141+142, r. running into the 141+142 ditch (eventually runs into radar ditch E-W). Cross over from dike to field separates ditches.
	30	>3.4	
	Apr. 22	3.4	at top of gauge
			opened drawdown all the way
	May 19	102.62	Still open
			P.D. - Coordinate w/ Pat.
		31	Dry.
Day	June 1	10.92	Open structure btwn units, pump west unit down into radar ditch – set pump up on south side of west unit and borrow area. Put water into south woods and open to radar ditch
	9	0-dry	pretty much dry → water only in ditch. - Pipe to ditch rusted thru / holes.
	July		
	Aug. 3		Dry - Great response of Millet
	17		Mowed
	26		Flooding thru state ditch
	31	1.66	
	Sept. 4		Flooding complete
	10	2.50	Units need reflooded? Eric mistakenly set Thompson open in wrong
	14	2.38	Unit + Flooded higher. Gate was opened between
	15	2.32	East + West side to add water to W side. Closed
	21	2.22	in p.m.
1.7-1.9	Oct. 1	2.02	
	13	2.10	
	26	2.12	
	Nov.		
	Dec. 7	2.18	ice

Unit: Woodies Roost West

Acres:

2008 Activity: High water on woodies east was let into woodies west in mid March. The Thompson was set up in the fall as part of the system to get water to the southern units.



Unit Goals: Provide foraging habitat and cover for wading birds and waterfowl.

Objectives: Manage for hemi marsh conditions

Strategies: East divider dike and south dike scheduled for repair. Draw unit down depending on construction.

Potential Problems: Beaver and construction

Unit: Woodies Roost West – Based on previous years, full pool is 2.6

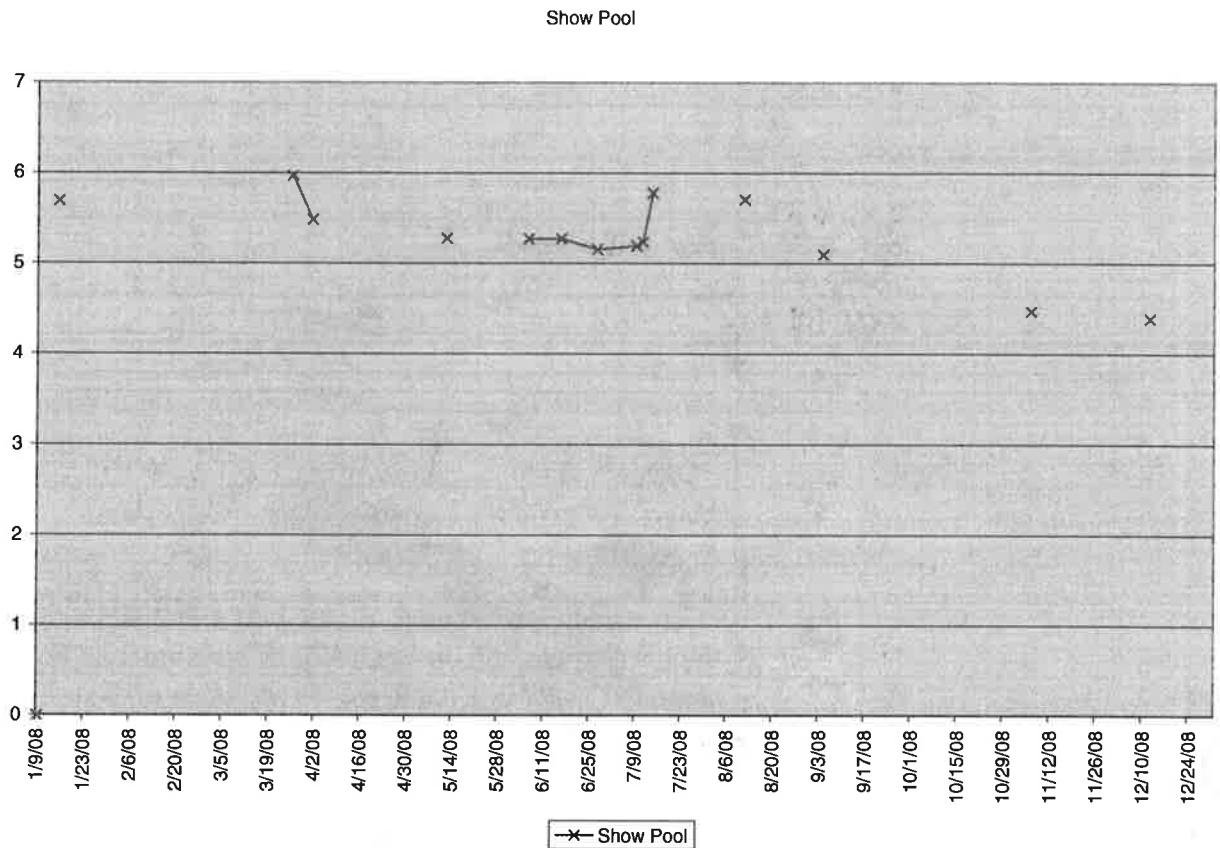
0.8 - gauge meets bottom

Water level guide	2009 Date	Actual Water level	Notes
	Jan. 5	1.90	
	Feb. 26	2.30	
	Mar. 3	2.30	
	4	2.28	Trapper (Hetic) thought there was enough H ₂ O for good muskrat summer conditions
2.6	18	2.50	Water in SE woods
	30	2.40	
	Apr. 22	1.9 ?	
	May 19	0	open for drawdown, water draining thru channel, unit still flooded
Dry			Dry
	June 1	0	Open structure btwn units, pump west unit down into radar ditch – set pump up on south side of west unit and borrow area. Put water into south woods and open to radar ditch
	9	0	Drawn Down
	July		
	Aug. 4	0	
	17		mowed Blind area
	31		Flooding
	Sept. 10		1100 added from E side
	14		2 thompsons flooding west side
	16	0.8	Unit needs reflooded? Water just reaching bottom of gate
	21	0.9	23 - PUMP OFF
	Oct. 13	0.80	
1.0-1.3	26	0.80	
	Nov.		
	Dec. 7	0.84	ice

Unit: Show Pool

Acres: 41

2008 Activity: The water was so high in February, an extra board could not be pulled to let water off faster.



Unit Goal: Because of the location of this pool to the office, it has been designated as a “show” pool with the intent that it can provide viewing of waterfowl including other wildlife and be a model wetland. This unit will be managed as a permanent wetland with deeper water to over winter fish and provide public catch and release fishing opportunities. Reevaluate in 2010.

Objectives: Increase diversity of emergent marsh vegetation and provide deep water for fish habitat.

Strategies: Monitor dikes, woods behind shop, and water depth on higher ground. Treat invasives.

Management Strategy Constraints: East dike and south dike weakest/lowest of unit. Max water level is 5.60. Ideally, we’d hve more water in showpool. The problem is low lake levels and lack of a water source. Future plans may need to think about dredging NS radar ditch or consider other managing for other habitat types (ie – scrub/shrub)

Unit: Show Pool

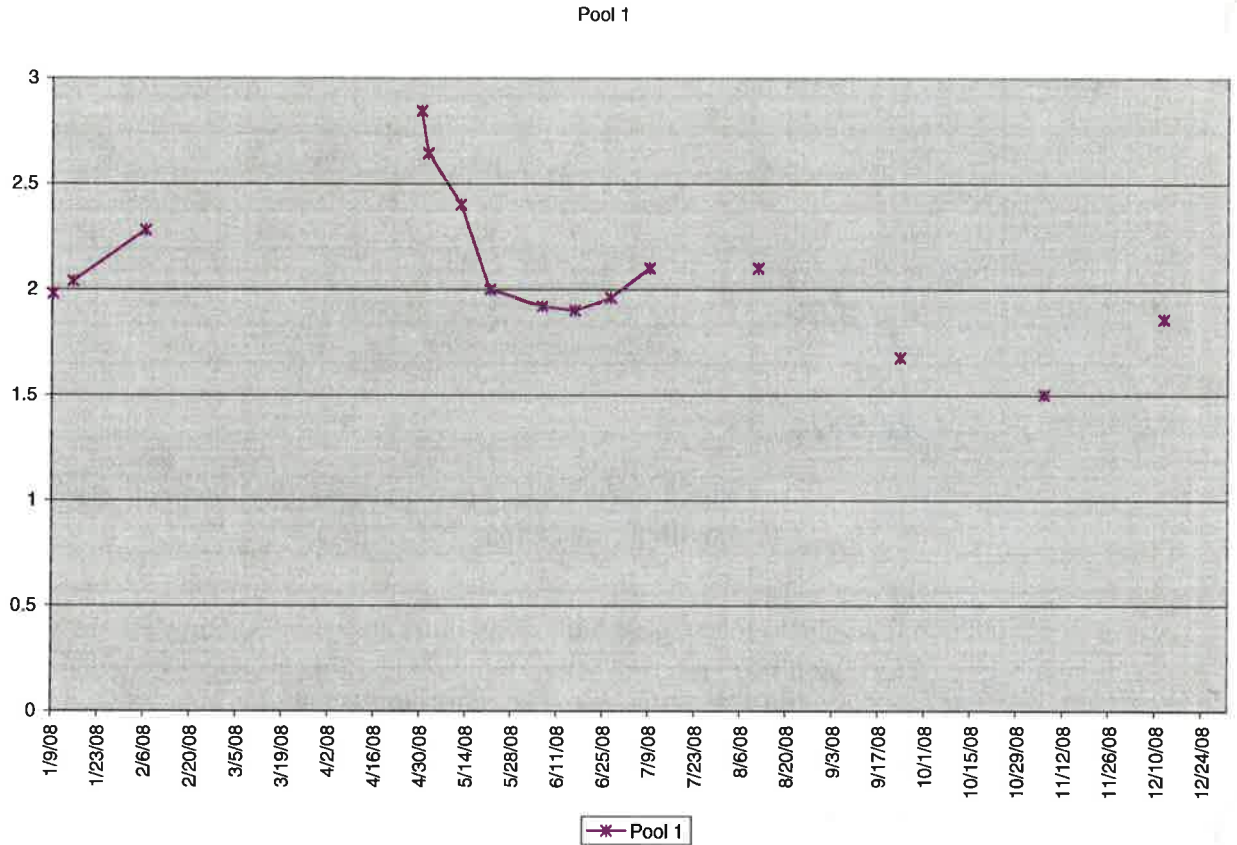
Aggridrain 15 3/4" wide. Max water level is 5.60

Water level guide	2009 Date	Actual Water level	Notes
	Jan.		
	Feb.		
	Mar. 3	5.58	
5.60	11	5.76	
	30	5.48	Just barely flowing out
	Apr. 22	5.60	
			Shoot water levels btwn goosepen & showpool – look for possible connection
	May 19	5.4	
	June 1	5.35	Monitor beetles
	9	5.30	
	19	5.25	
	26	5.37	
	July 17	5.05	Evaluate middle veg Dirty Meter
	28	4.95	
	Aug. 4	4.88	nearly lake level - 3-4" higher
	10	4.80	
	21	4.68	Dirty
	Sept. 17	4.36	- Water only in channel along dike + platform area.
	Oct. 20	4.28	
	26	4.28	
	Nov.		
	Dec. 7	4.26	ice

Unit: Pool 1

Acres: 343

2008 Activity: High water was let out through the NW gate in May for 21 days.



Unit Goal: Provide habitat for nesting common terns, foraging herons, mussel beds, rails, and fish. As well as provide a rest area for waterfowl.

Objectives: The topography of this unit allows for a variety of water level depths. To provide habitat for nesting common terns, fish and mussels, maintain deep (3-4ft) open water areas. Provide emergent and submergent wetlands for wading birds, waterfowl and invertebrates. The higher elevation areas along the south and north parts of the unit will provide flooded grass and sedge areas for rails.

Strategies: Ensure unit is at optimum pool in the spring and allow evapotranspiration to decrease water levels no lower than 0.90 by September.

Management Strategy Constraints:

Unit: **Pool 1** – Management may change based on Crane Creek structure

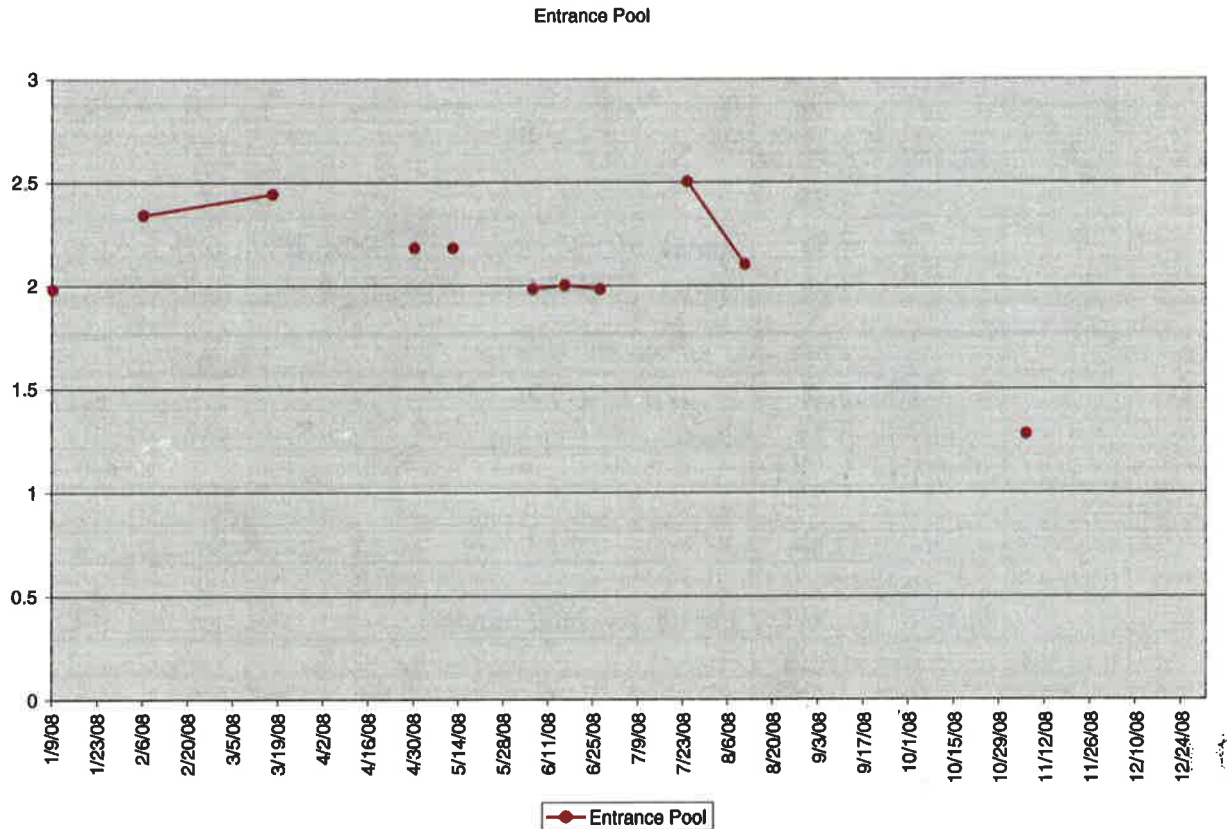
Water level guide	2009 Date	Actual Water level	Notes
	Jan.		
	Feb.		
	Mar. 4	2.5	
	12	2.78	
2.0	18	2.76	Opened 10-12" to C.C. 19-Closed to C.C. 2.74
	26	2.66	Opened 10-12" - Gate sticking, might be off track @ bottom 30 2.5 2
	Apr. 1	2.45	
	13	2.16	
	15	2.2	22 - 2.12
	27	1.94	Closed.
	May 19	1.94	
	June 1	1.86	Put up new hunt blinds?
	9	1.78	
	19	1.72	
	26	1.81	
	July 17	1.48	
	28	1.40	dirty!
	Aug. 17	1.28	
	21	1.18	Dirty
	Sept.		
0.90			
	Oct. 20	0.92	100 ducks @ NW corner (30 green w. I) C.C. → 100 ducks &
	26	0.90	100 shorebirds
	Nov.		
	Dec. 7	0.90	

set next years
goal level in
spring higher
maybe 2.4"
2.3

Unit: Entrance Pool

Acres: 150

2008 Activity: No active management. The extra rain in July and again in September allowed this unit to remain flooded the entire summer. It received excellent bird use the entire season.



Unit Goal: Provide a diversity of marsh type habitats, ranging from cattail stands to open water. Attract a variety of waterfowl, shorebirds, water birds, and wetland animals to provide opportunities for wildlife viewing. Control exotic invasive species.

Objectives: Provide shallow to deep emergent marsh. Maintain higher water levels to combat purple loosestrife.

Strategies:

Management Strategy Constraints: Water can only be added by using a portable pump.

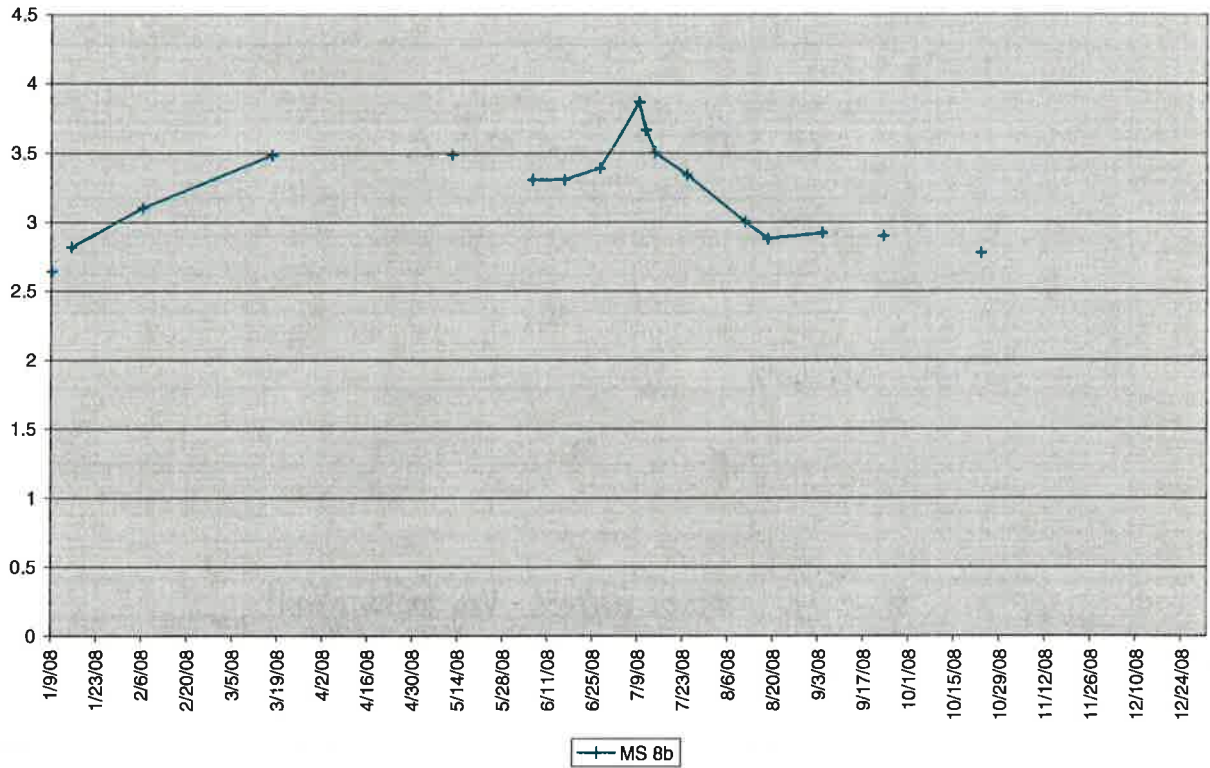
Unit: Entrance Pool

Water level guide	2009 Date	Actual Water level	Notes
	2/26	2.60	Ice
	Mar. 4	2.68	
	9	2.80	11- 2.94
	18	2.74	19- 2.74 Pulled 4' board
	30	2.42	Flowing ~ 1" over board
2.0	Apr. 22	2.48	
>1.8	May 9	2.3	
>1.8	June 1	2.1	
	9	2.14	
	19	2.05	lots of burreed - Veg looks good!
	26	2.19	
>1.8	July 17	1.8	
	28	1.77	
>1.8	Aug. 4	1.66	
	10	1.58	
	21	1.43	
	Sept. 15	1.16	
	Oct.		
1.28			
	Nov. 2	0.98	Pull 1 extra board to prevent high water piling up in Nov-March. (intended to help beetles over-winter)
	Dec 7	1.10	Ice

Unit: MSU 8B**Acres: 100**

2008 Activity: In July the gate in the SE corner was opened to let excess water out. In Mid August the pump was turned on in attempt to maintain higher water levels. The structure in the pump ditch that goes under Krause road leaked much of the water that was being pumped back into the lake. Pumping was abandon after 2 weeks. The leaking structure was removed in the fall.

MS 8b



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Manage against invasives and allow for more open areas in the marsh.

Strategies: Maintain high water levels in the unit throughout the growing season. This will likely require periodic pumping and active management.

Management Strategy Constraints: Water levels may need to be manipulated to install a pump structure from the Visitor Center ditches into 8b as well as add an agridrain to the south east corner of the unit.

Unit: MS 8b

Full pool 3.40-3.46 – May need to pump to maintain high water. Readings can be taken from the SE structure measuring from waters surface to top of brace.

Tape measure reading of $21 \frac{1}{2}'' = 3.48$ on the gauge

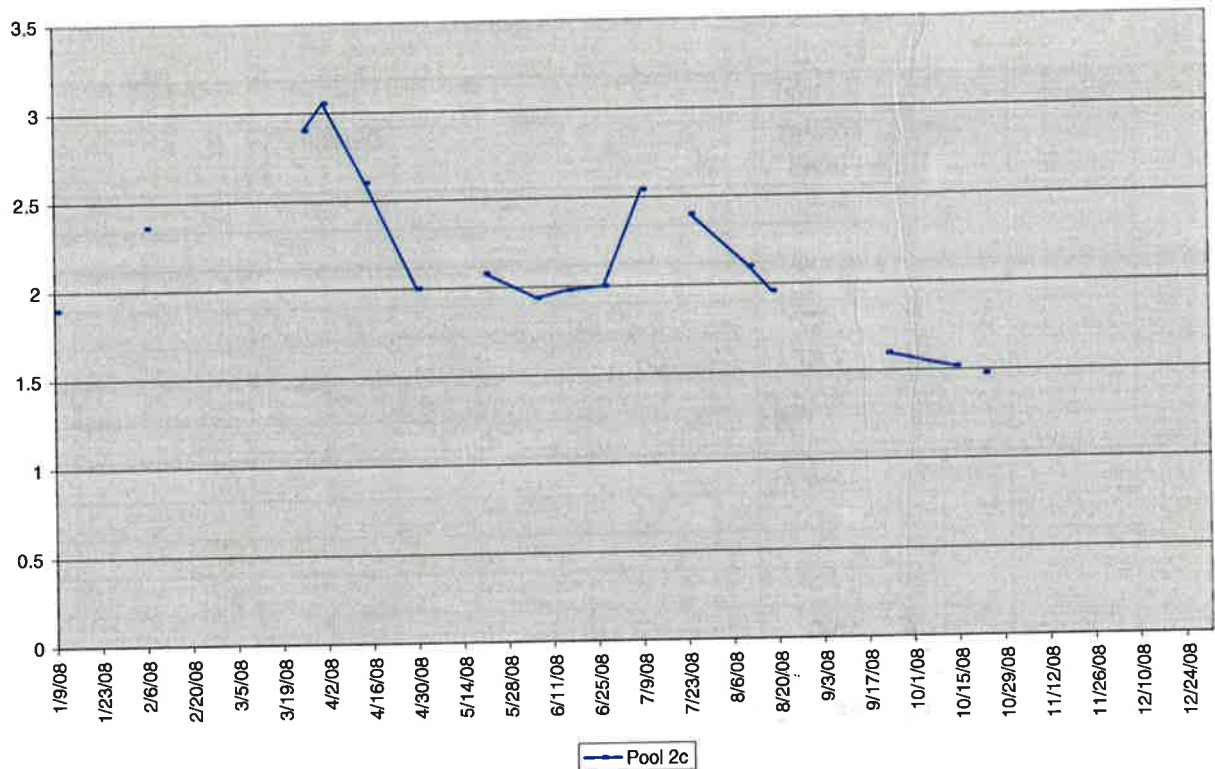
Water level guide	2009 Date	Actual Water level	Notes
	1/5	3.32	
3.4	Mar. 9	18"	opened SE gate 10am. Closed 2pm.
	18	3.80	20 - 3.76
	30	3.66	at least 1" over board
	Apr. 8	3.68	
	May 6	3.60	
	19	3.52	
	27	3.40 3.40?	
	June 1	3.41	
	9	3.36	6/11 - Pump turned on 2pm @ 3.34 OFF 6/12
3.4	15	3.34	Pump on 10am 18 th - Pump OFF
	19	3.48	
June 20	July	3.59	
	July 10	3.30	
	July 17	3.24	
	28	3.23	
3.4	Aug. 3	3.28	Pump on
	7	3.38	OFF
	17	3.28	18 - Pump on Pump OFF 8/21
	31	3.34	
	Sept.		
3.4			
	Oct. 20	3.24	25 gauge
3.4	11/2	3.24	
	11/25	3.18	
	12/7	3.20	ice

Unit: Pool 2C

Acres: 82

2008 Activity: High water was let off through the SE gate in April and late September.

Pool 2c



Unit Goals: Attract a variety of waterfowl, shorebirds, water birds, and wetland animals to provide opportunities for wildlife viewing. To enhance water level management capabilities, a project to ditch MS 8A and install individual stop log structures to Pool 2A, 2B, and 2C is proposed.

06.12.08

Objectives: Manage for hemimars conditions.

Strategies: Maintain higher water levels in the spring to stress surviving loosestrife plants (approximately 2.0). Allow for evapotranspiration.

Management Strategy Constraints: Water can only be added with a portable pump or high lake levels. High lake levels can also inhibit taking water off the unit and free flowing into the lake.

Unit: Pool 2c I think 2.0 on the gauge = about 2-2½ ft of H₂O across most of the unit.

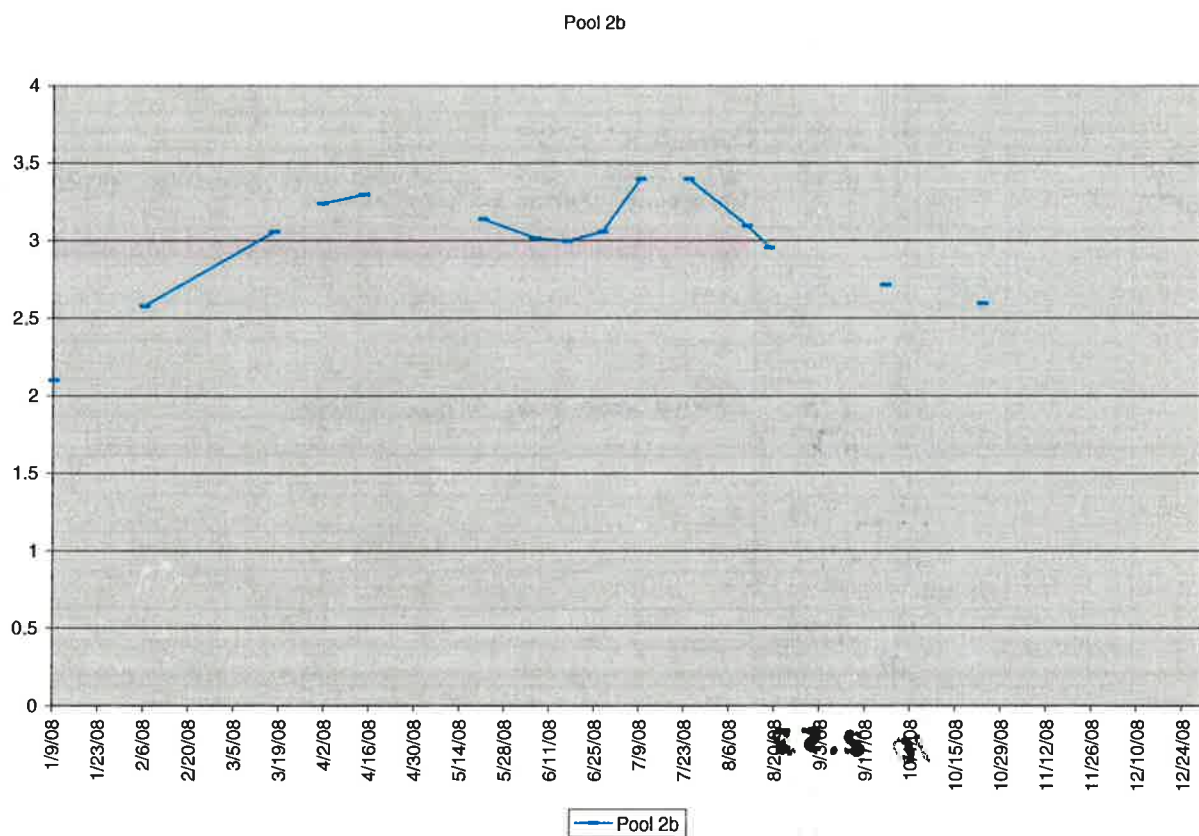
I think 2.0 on the gauge = about 2-2½ ft of H₂O across most of the unit.

3/23rd - opened
to lake levels*

Unit: Pool 2B

Acres: 95

2008 Activity: No active management.



Unit Goals: Attract a variety of waterfowl, shorebirds, water birds, and wetland animals to provide opportunities for wildlife viewing.

Objectives: Perennial smartweed is the dominant emergent vegetation in the unit, try to encourage more variety of vegetation. Provide areas of deep submergent wetlands for fish and invertebrates, as well as shallow emergent wetlands for wading birds and waterfowl.

Strategies: Obtain an average depth of 12-14 inches (guage reading of 2.0). This will provide wading birds foraging habitat and discourage loosestrife. Evapotranspiration through July and August will decrease levels 6-8 inches providing shallow wetlands for fall dabbling ducks and possibly some larger shorebirds.

Management Strategy Constraints: Currently there is no independent water control for this unit, unless a portable pump is used. This can be costly and needs frequent monitoring/maintenance. Refuge budget and project priority will determine water management activities.

Unit: Pool 2b

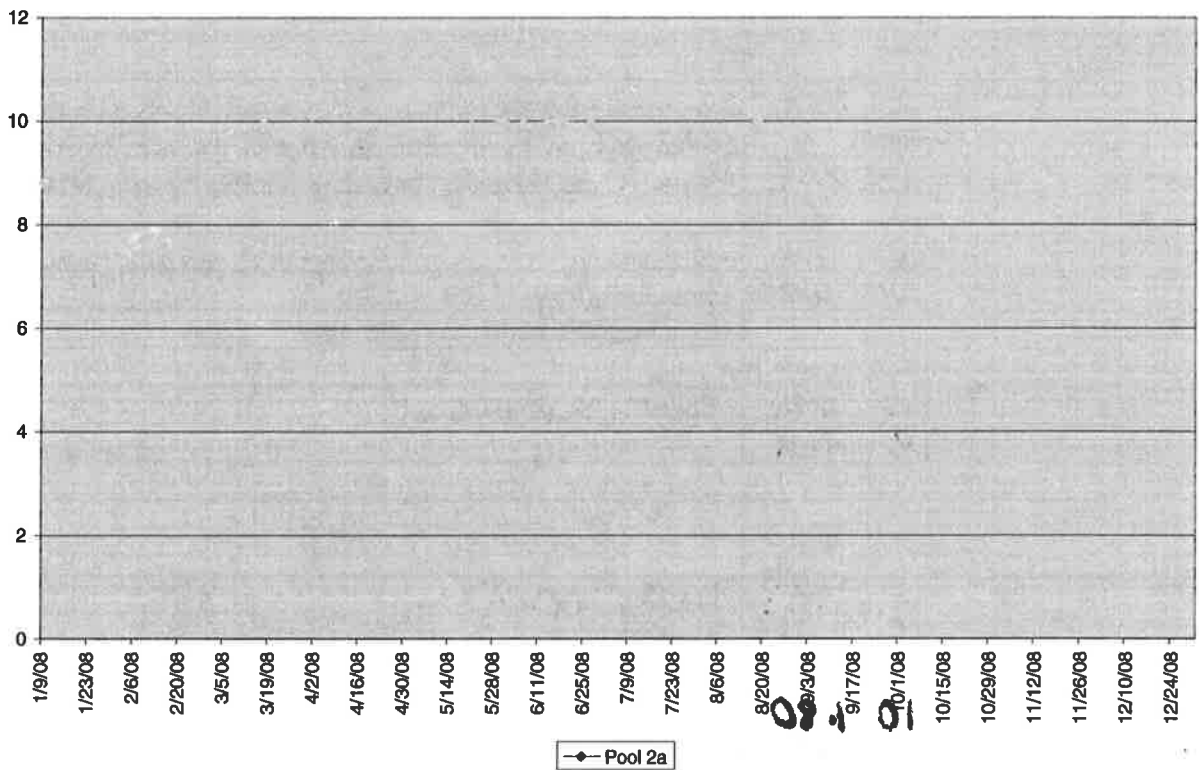
Water level guide	2009 Date	Actual Water level	Notes
	1/5	3.1	
2.3-2.5	Mar. 18	>3.4	Over gauge - 1 hole straining on post. Opened to 2ft all the way.
	19		Opened gate on P1 structure to 2B - let H ₂ O in to C.C. Closed 2A/2B structure
	23	>3.4	Maybe 2 holes showing. Setting up another pump for 2B in NE corner
	30	>3.4	
	Apr. 8	2.46	-still pumping - OFF in PM 9-ON + OFF pumping - pump problems
	20	2.30	-done pumping 23 - 2.30
			Set up portable to take water out -
	May 6	2.24	Egrets in water smothered.
	19	2.2	
	June 1	2.10	
	9	1.9?	dusty meter
	19	1.9?	meter not readable!!
	26	2.04	
2.0	July 10	1.80	
	17	1.7	
	28	1.61	
	Aug. 3	1.58	P.L. bad in SW corner + creeping up w dike. Higher level would be better
	10	1.48	
	17	1.34	low on SE corner w West side Pump on - 8/20
	21	1.2-1.3?	middy meter 24 - 1.1 Pump OFF 31 - 1.1
	Sept. 8	1.08	
	Oct.		
1.5	20	0.90	150 ducks
	12/7	0.92	

Unit: Pool 2A

Acres: 65

2008 Activity: No active management.

Pool 2a



Unit Goals: Control exotic invasive plants (Eurasian watermilfoil) and willows encroaching on high ground. Attract a variety of waterfowl, water birds, wetland animals and invertebrates to provide opportunities for wildlife viewing. To enhance water level management capabilities, a project to ditch MS 8A and install individual stop log structures to Pool 2A, 2B, and 2C is proposed.

Objectives:

Strategies:

Management Strategy Constraints: It is difficult to remove high water. 8a must be drawn down at the same time, or a portable pump set up. Water must be added via 8a, or with a portable pump as well. Portable pumps take staff time to maintain and may conflict with other project priorities.

Majority of mudflats exposed at 7.66

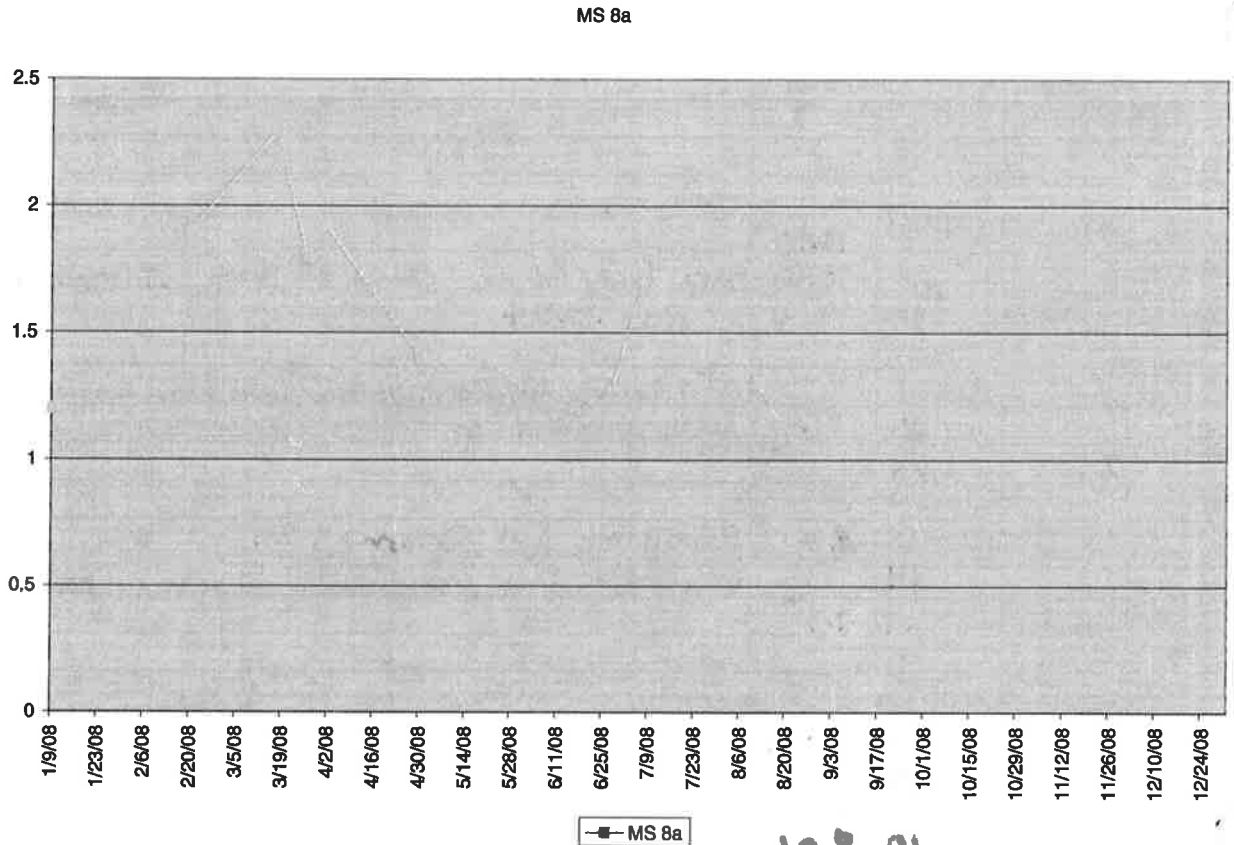
[illegible]

the gauge
reads 0.6,
so just add
a "1" in front
to make it
10.6, b/c after
0 is "9.9"

Unit: MSU 8A

Acres: 56

2008 Activity: High water was let out in March and April.



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Encourage marsh vegetation and invertebrates.

Strategies:

Management Strategy Constraints:

Unit: MS 8a

Water level guide	2009 Date	Actual Water level	Notes
	2/12	1.98	
	Mar. 4	2.08	
	18	2.30	19 - Opened 11am 20 - 1.98 22 - Closed 1.38 23 rd - 1.38
	30	1.42	
	Apr. 8	1.54	
17	20	1.70	Opened 4" - 11am 21 - 1.64 8am 22 - 1.52 8am 3pm closed 1.50
	May 19	1.46	
	June 1	1.37	
	9	1.28	
	19	1.19	
	26	1.3	
	July 10	1.04	
	17	.9	
	28	.81	
	Aug. 3	0.70	4. - Pump on
	7 th	1.16	Pump OFF
	21	.92	
	31	.86	
	Sept.		
	Oct. 20	0.52	50 geese 30 ducks
	22	0.80	Pump OFF 3pm
0.7	29	0.88	
	11/10	1.20	Pump on - putting H ₂ O into 2A OFF in P.M.
	11/12	1.14	Pump on " "
	11/24	1.0	Pump on " "

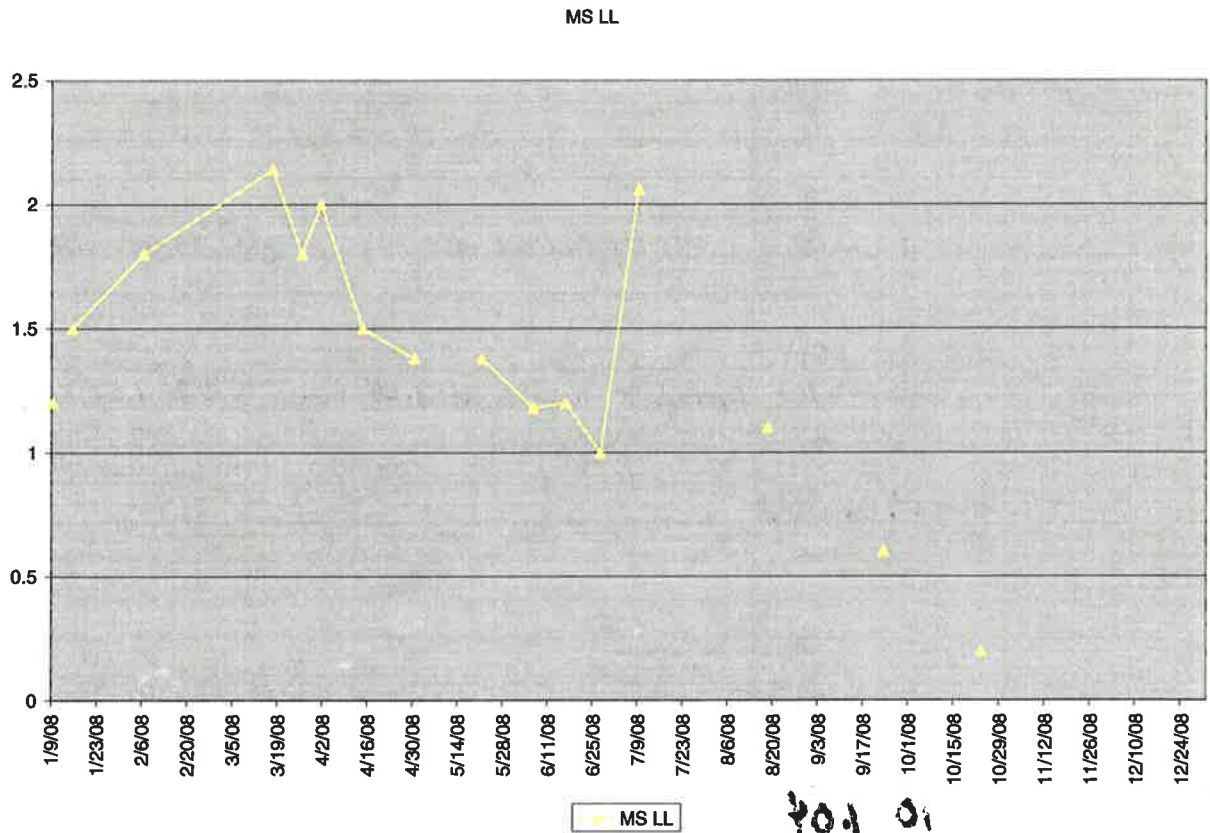
11/27 -0.8

12/1 .88

Unit: MSU LL

Acres: 27

2008 Activity: High water was let off in the spring and during significant rain events.



Unit Goal: Maintain unique refuge habitat and native plants. Provide foraging and nesting habitat for migratory birds.

Objectives: Maintain marsh conditions.

Strategies: Allow full pool in spring and evapotranspiration throughout the season.

Management Strategy Constraints: Unit floods easily from rains, resulting in dramatic water level changes. Approximately 1.3 unit floods north woods.

Unit: MS LL

Possibly, 1.30 is full pool. Higher water backs up into north woods.

Pipe
Not Flowing

Water level guide	2009 Date	Actual Water level	Notes
	Jan.		
	Feb. 12	1.90	
1.3	Mar. 4	1.90	
	18	2.08	Opened to c.c. Pipe doesn't appear to be functioning properly. 1:30
	19	2.08	Closed- 20-2.0 23-1.86
	30	1.71	
1.3	Apr. 8	1.68	
	13	1.56	
	20	1.64	
1.3	May 19	1.46	
	June 1	1.37	
	9	1.26	
	19	1.14	
	26	1.31	
	July 10	1.04	
		.8	
	28	.66	
	Aug. 3	0.56	
	7	0.50	
	21	.06	
	31		1 inch Below
	Sept.		
	Oct. 20	0.10	
	29	0.08	
	11		Pumped down w/ Thompson to locate pipe

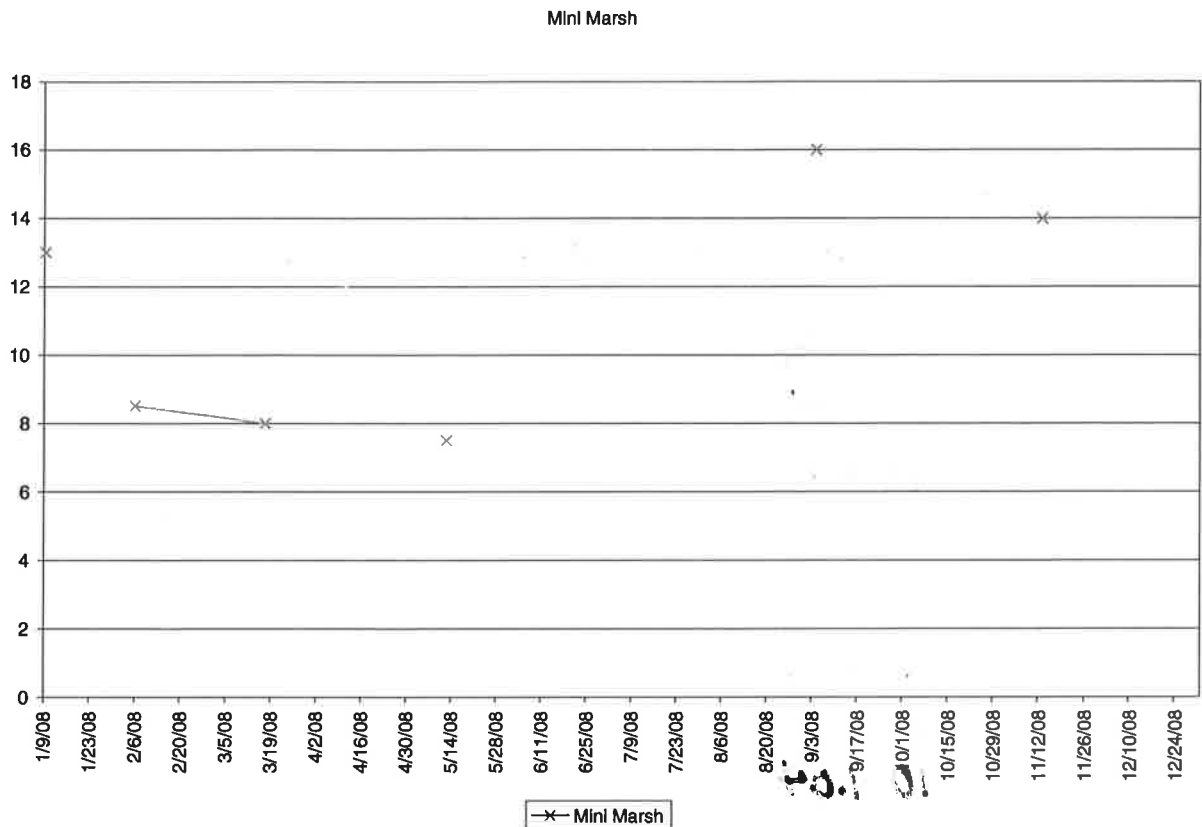
12/7

" " ice.

Unit: Mini Marsh

Acres: 30

2008 Activity: Minimarsh is used as a holding tank to pump up blind 93 in the fall. During this time water levels fluctuate highly until pumping is finished.



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Maintain as hemi marsh.

Strategies: Possibly conduct spring burn.

Management Strategy Constraints:

Future project idea: raise south dike – borrow from ditch and inside unit - taken from
Habitat mtg 2/3/09
DB, EP, RH, SM

Unit: Mini Marsh

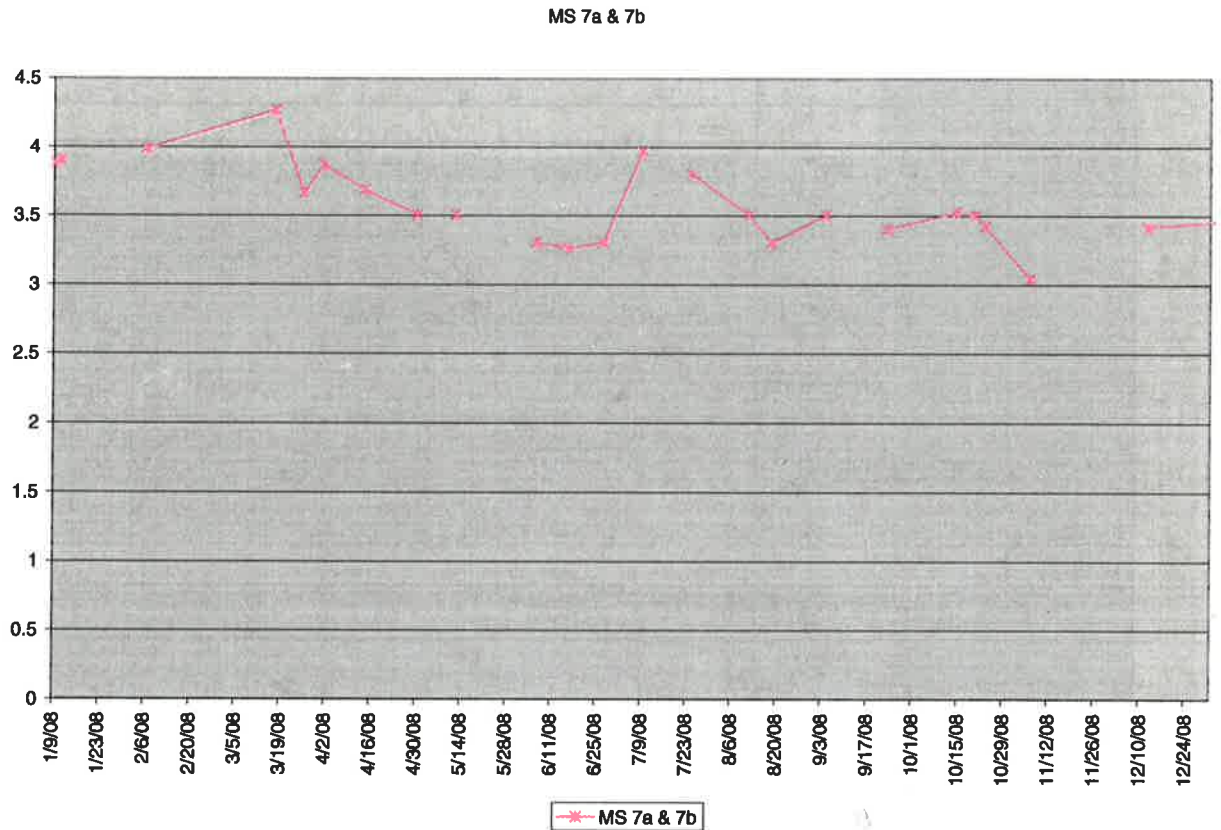
Measure from waters surface to top of ^(black) splitter box. If water in unit gets much higher than half way up the side of the discharge pipe, water leaks through splitter box to Crane Creek. Needs new flap gate.

Water level guide	2009 Date	Actual Water level	Notes
	Mar. 11	5 1/2"	
8"			
	Apr.		
	May 19	10 1/2"	
	June 1	11"	
	9	12"	
	19	13.75"	
	26	12.1"	
	July 17	17"	
	28	15.5"	
	Aug. 21	19"	
	Sept.		
	Oct.		
10"			
	12/7	23 1/2"	ice

Unit: MSU 7A & 7B

Acres: 94

2008 Activity: High water was let off in spring and water was added in the fall.



Unit Goal: Provide migratory bird foraging and resting habitat. In addition the transitional areas on 7B will allow for easily accessible upland habitat for nesting as well as provide a gradient of water levels.

Objectives: Manage water levels against invasives.

Strategies: Maintain full pool by pumping throughout year as needed and treat invasives.

Management Strategy Constraints:

Future project: raise Krause Rd to maintain deeper H₂O to control Invasives

Unit: MS 7a & 7b -

Water level guide	2009 Date	Actual Water level	Notes
	1/5	3.60	
	2/12	3.90	
3.5	Mar. 4	3.70	
	9	3.80	
	12	4.38	
	18	3.86	opened 6" 12:30 Closed 3.66-19 20-3.66 23-3.62
	Apr. 8	3.68	
	21	3.68	
	May 19	3.54	
	19	3.66	
	June 1	3.52	
	9	3.46	15-3.38 Pump on 10am 16-3.46 17-3.50
	18	3.58	Pump OFF
	19	3.58	
	July		Pump to maintain full pool if necessary
	6/20	3.165	
3.5	July 17	3.33	Hard to read - Dirty meter
	28	3.18	Dirty
	Aug. 4	3.10?	" "
	10	3.00	
3.5	21	2.88	
	Sept. 4	2.78	
	16	2.68	Pump on 11:20 Am
	17	2.80	
	21	2.92	OFF 10:30 22-3.02
	Oct. 16	3.0	
3.0	29	3.04	
	12/7	3.06	
	12/18	3.14	

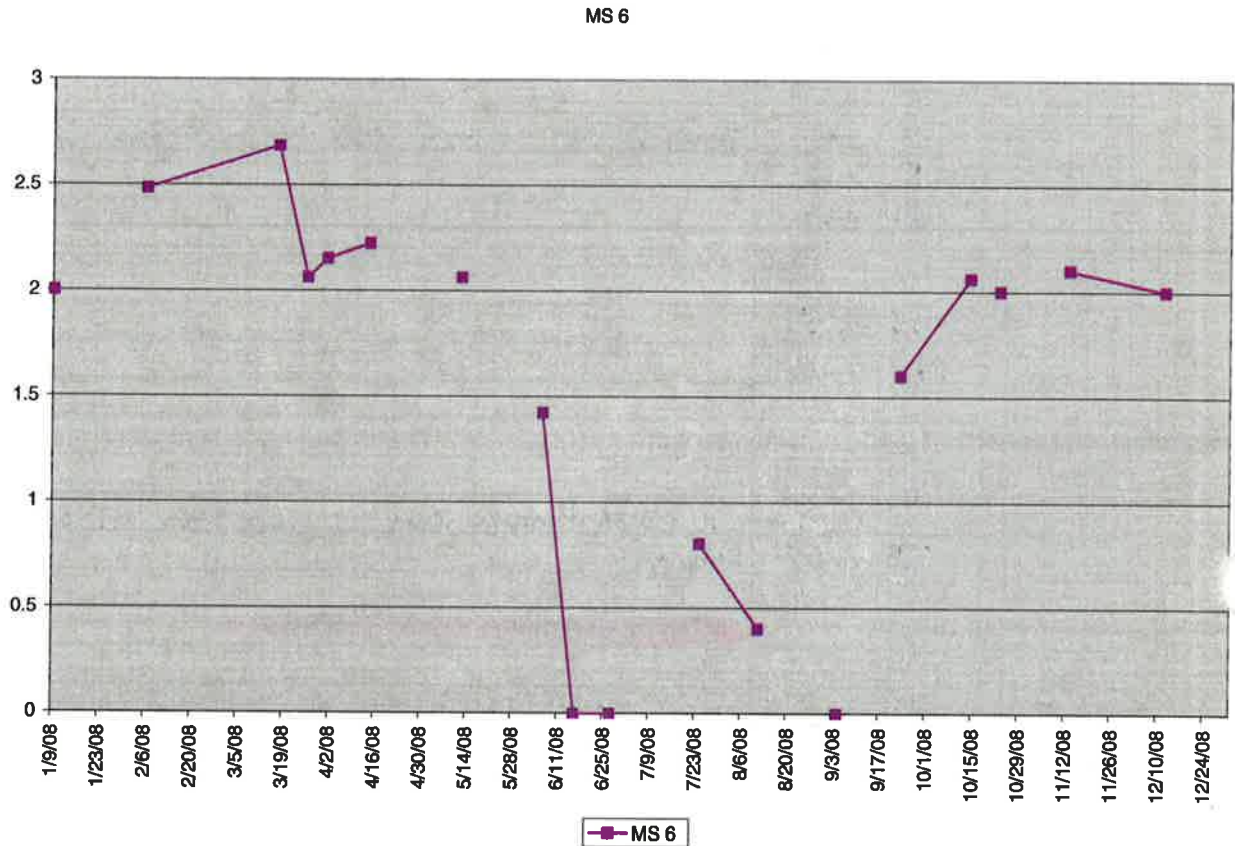
30 3.59

~~OLD STAFF~~OLD STAFF
3.14NEW STAFF
73.96

Unit: MSU 6

Acres: 70

2008 Activity: High water was taken off in March and put into FU6 and then Crane Creek. In June water was let out into Crane Creek to complete north dike slope on unit side. The unit was drawn down for a month and pumped up in mid July. For the rest of the summer through September, the unit would dry up through evapotranspiration and then would be periodically pumped up to maintain mudflat habitat.



Unit Goal: Provide foraging and resting habitat for migratory birds as well as brood habitat.

Objectives: Manage for hemimarsh conditions.

Strategies: Maintain full pool

Management Strategy Constraints:

Unit: MS 6

Water level guide	2009 Date	Actual Water level	Notes
	1/5	2.22	
	2/12	2.96	strong SW wind
	2/13	2.90	opened to C.C. in A.M., closed 2/14 A.M. @ 2.5?
2.0-2.4?	Mar. 4	2.50	
	9	2.66	Taking H ₂ O off FV6 thru MS6 - MS6 opened to creek
	10	2.66	Closed 11-2.78? Windy - Opened to C.C. + FV6 12-2.78 Closed
	18	2.70	Opened to C.C. 4" 19-2.60 20-2.56 + Closed @ 3pm - 2.40 23-2.54 Opened C.C.
	Apr. 21	2.40	Closed → 26-2.48 - closed FV6 gate 30 2.46
	Apr. 4/8	2.48	Opened 10am to C.C. + FV6 closed in pm.
	21	2.54	Opened to C.C. 8:30am - Closed 3pm 22-2.50 opened 9
	23	2.46	27-2.42
	May 7	2.36	
	19	2.34	
	June 1	2.01	
	9	2.14	
	15	2.06	
	19	2.05	
1.5	July 26	2.16	Evaluate water depths - pump if needed
	July 19	1.96	
	28	1.06	
	Aug. 4	1.58	HV6 closed to MS6. I think HV6 watershed has helped MS6 stay fuller.
	10	1.46	
	18	1.34	
	21	1.28	
1.5	Sept. 25	1.62	31 - 1.4
	Sept 1	1.78	Pump on - 2 - Pump off 1.78
	17	1.90	(Pumping MS ditch down on/off
	22		Pumping UP for HV6. 24 - Pump off 2.6
	28	1.9	Pump on
	Oct. 4	3.2	Pump off
	6	2.78	HV6 Full
	13	2.70	
	20	2.64	75 geese 50 ducks/coots
	12/7	2.50	
	12/18	2.54	

OLD STAFF

2.54

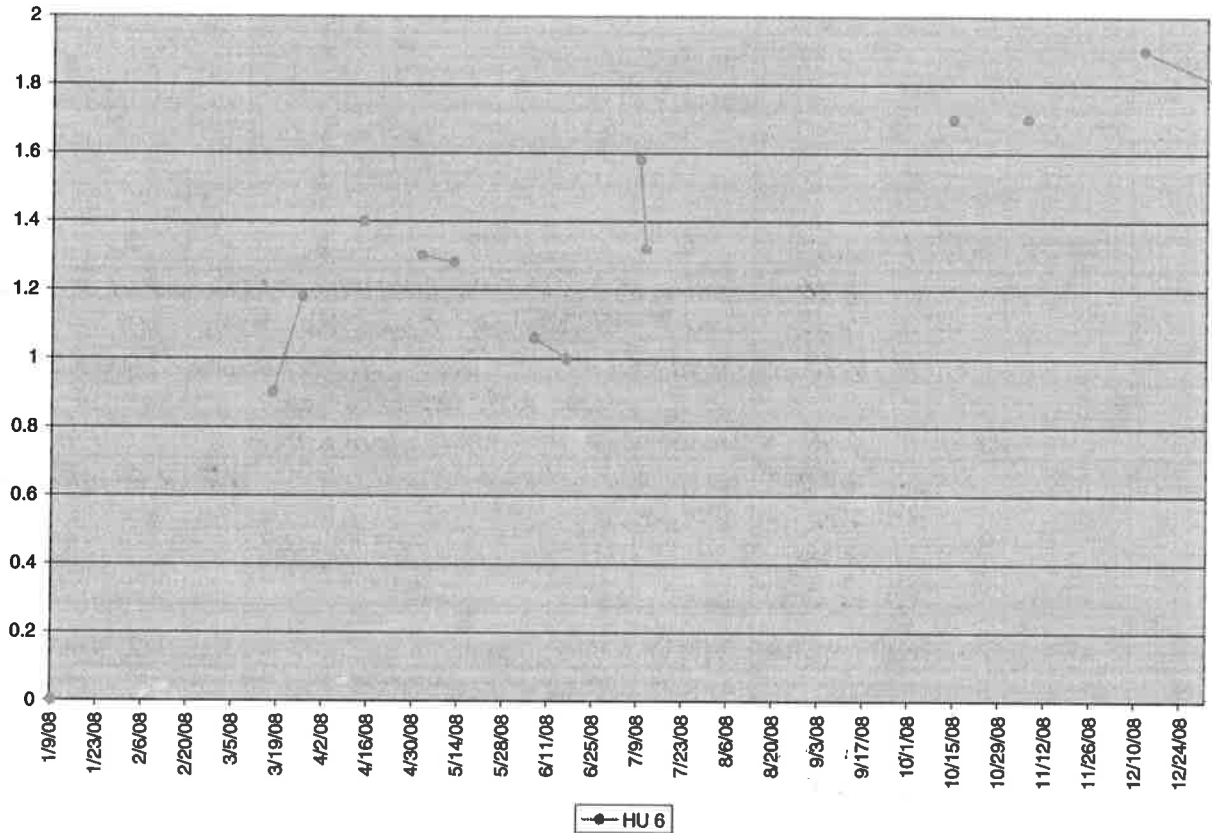
NEW STAFF

75.40

Unit: Hunt Unit 6

Acres:

2008 Activity: In early July, high water was let out of the unit to allow for better germination of annual plants. The unit was reflooded 9/21/08.



Unit Goal: Provide foraging and resting habitat for migratory birds as well as provide a quality hunting area.

Objectives: Manage for good annual plant production and establishment of some perennial vegetation.

Strategies: May need to remove high water in spring and early July.

Management Strategy Constraints:

Unit: HU 6
Full pool 1.8

Water level guide	2009 Date	Actual Water level	Notes
	Jan. 5	2.08	1/8 - opened into MS2 1/14 - 2.0 Closed, not flowing into MS2
	2/12	2.20	
	Mar. 4	2.18	
	9	2.30	-opened to MS6 (3/4 opened)
	10	2.18	Take water out (pump or remove coffer dam) Closed.
	11	2.38	Opened to MS6 9am 12-2.20 Closed 3pm 18 th - 2.14 Opened to MS6 + C.L.
	Apr. 3/20	1.94	Manage for ideal dabbling conditions - 4-6" 3/23 - 1.76 26 - 1.68 Closed to MS6.
1-1.4	4/8	1.74	-Opened to MS6
	13	1.60	21-1.76 23 - 1.68
	May 6	1.56	
	19	1.5	
	June 1	1.4	
	9	1.36	
	19	1.26	
	26	1.34	
	July 7	1.20	
	17	0.70	
	28	.84	
	Aug. 4	0.78	Closed to MS6. Opened to MS ditch. H ₂ O mainly in ditch. Unit mostly dry w/ some areas still moist. Cattails w/ high areas having rushes, bidens, sedges & plantain.
	10	0	
	21	0	
	Sept. 14	0	Replacing Pipe to FUG & MS ditch.
	23	→	Begin flooding hunt unit
	28		
	Oct. 6	2.78	Fall - MS6 - 2.78
1.7-1.8	12/17		Closed to MS6

NEW STAFF

73.36

Unit: MS 2 North

Water level guide	2009 Date	Actual Water level	Notes
	Jan.		
	Feb		Boards are down btwn N+S.
	Mar. 9	Close to Fill	opened to veler ditch - dike erosion
	12	Closed	Set boards btwn units for shorebirds 18-20" from top of structure
	23	Closed	
	Apr.		
	May		
	June		
	July		
	Aug. 17		Turned pump on to fill N+S units.
	20	67 1/2"	@ SE structure
	31	44 1/2"	600 Ducks
	Sept. 4	43"	8-43"
	29	48"	
	Oct. 13	43"	
	11/24	44 1/2"	
	12/7	44 1/2"	Closed to South side

Rail Unit - ~~N+S~~ structure

OLD

43"

NEW STAFF

75.02

8/20 - 51 1/2"

8/31 - 42

9/4 - 40"

9/8 - 39"

Unit: MS 2 South

Water level guide	2009 Date	Actual Water level	Notes
	2/12		Structure to pump ditch may need to pull 1 more board as unit fills - WATCH!
	Mar. 9		bottom log up btwn N+S unit - opened to Veler ditch
N+S structure → 12" → 18-20"	19		set boards btwn N+S to stop completely. Closed N unit to Veler
			Closed boards to MS ditch. Opened boards btwn N-S to Veler 22" closed
	Apr. 13		38 1/4" @ MS ditch connection structure. Opened boards to MS 2nd ditch
SE struc.	27		39 1/2" Closed boards to MS ditch ext.
	May 19		
	June		
	July		
	Aug. 20	66 1/2"	@ NE structure - open to N. unit. Pumping into N. unit
	31	43"	At SE structure
Sep. 4	37 1/2"		@ SE str. 13" of freeboard in structure
8	34 1/2"		
Sept. 15	36"		
29	37 3/4"		
Oct. 8	36 1/2"		Pump on
13	33"		
Nov.			
12/7	34"		Full Pool is 23"

OLD ~~33"~~

33"

NEW STAFF

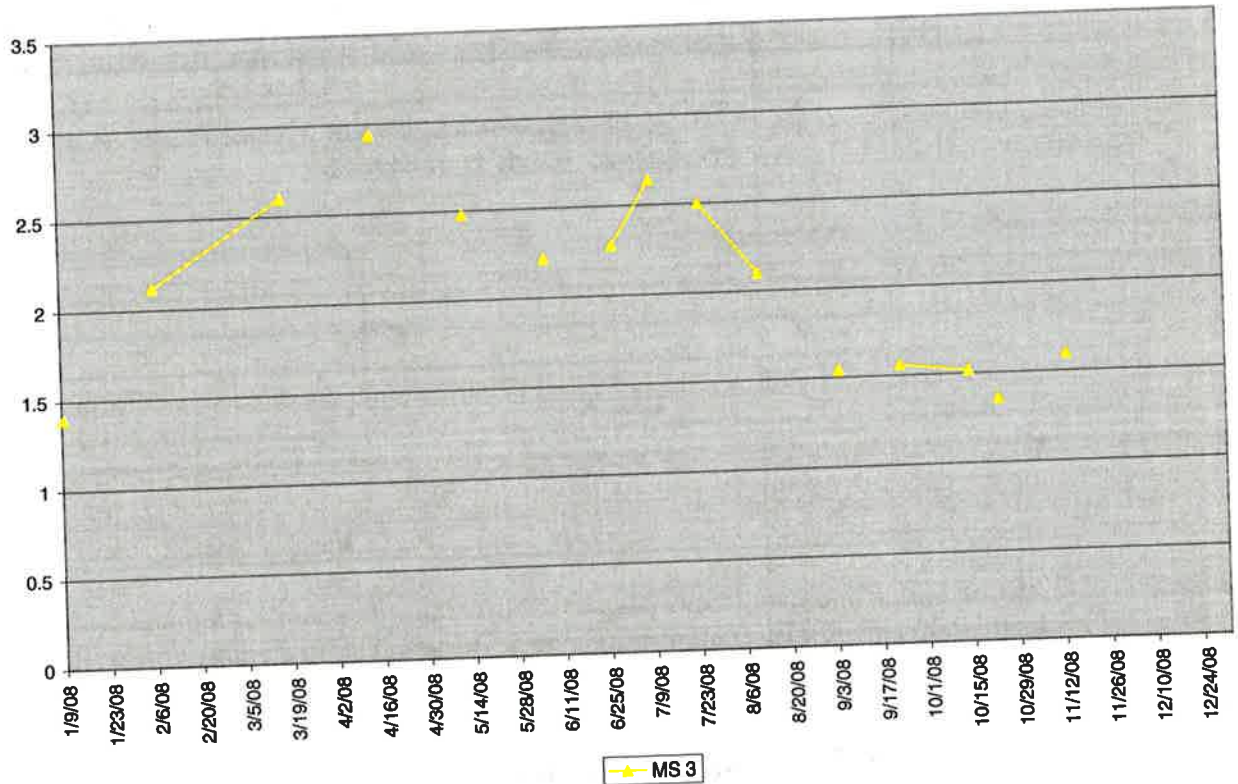
75.02

Unit: MSU 3

Acres: 225

2008 Activity: High water was let out in April. The double screw gates leak in the SE corner. Water levels dropped very low by fall. Much of the west side and interior had little to no water. Low lake levels and other management activities didn't allow for water to be added in the fall.

MS 3



Unit Goal: Provide a nesting and feeding area for migratory birds as well as brood habitat.

Objectives: Maintain as hemi marsh. Provide emergent and submergent marsh habitat for waterfowl, swans, and rails.

Strategies: Maintain flooded optimum pool. Dike work will be done on the north side and the SE screw gates will be replaced. Manage for higher water levels in the late summer/fall than in previous years – goal of 2.0

Management Strategy Constraints:

Unit: MS 3

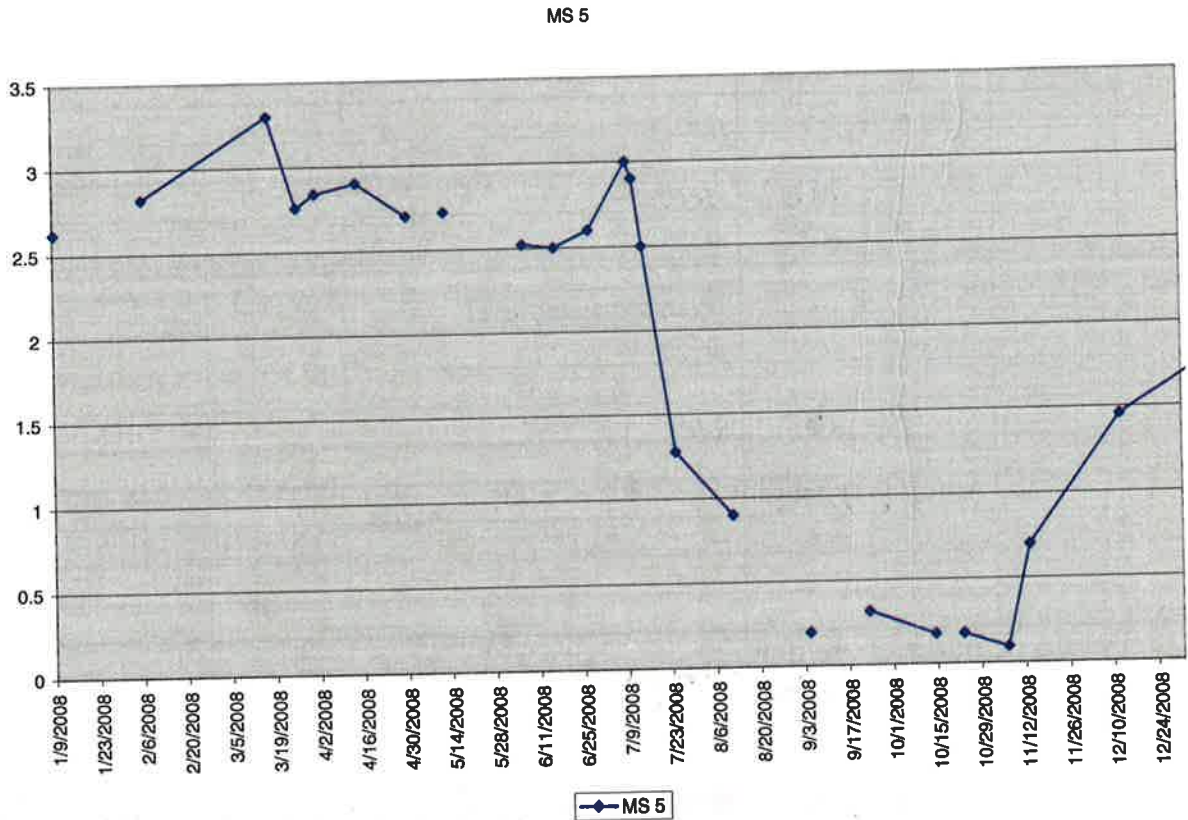
(when filling, open 24" gates all the way, 36" gate on ditch open only 1')

Water level guide	2009 Date	Actual Water level	Notes
	1/5	33 1/2"	1.8
	Mar. 4	28 1/4"	Trapper (Mayes) thought it could lose 4" for good summer muskrat conditions
	18	25"	2.34
	30		2.60
2.8?			2.58
	Apr. 8	25"	Evaluate water level
			2.60
	29	25"	2.60
	May 19	2.54	
	June 1	2.41	
	9	2.32	28 1/2"
	19	2.2	
	26	2.32?	lotsa Green SCUM
	July 7	2.16	Opened 1 gate 10" - putting in MS 3 - Draw down for construction / shorebirds
	8	2.0	3:19 33" 10-1.74
2.5	13	1.40	39" 7/15 Closed - 42"
	17	1.18	7/21 - Opened; 42" 7/23 - Closed; 48 1/2"
	Aug 28	.8	
		0	mostly dry
	Aug 21	0	
	31	0	
	Sept.		
2.0			
	Oct. 21		Construction Complete - now cattail & Phrag thick. Rest of unit has patchy cattail w/ barnyard or R.C.G. thick in lot w/n.
1.5		0.66	Some areas of burned - especially on West Side. South side has lot of water smartweed in flower. D.D. too late for grass & smartweed to seed.
1.7	11/24	1.32	
	12/7	1.28	

Unit: MSU 5

Acres: 256

2008 Activity: A partial draw down was initiated in March. The complete draw down was started July 9th and dry on the west side by August 1. The divider dike between ms 4 and 5 was redone. MS 5 provided great shorebird habitat for fall migration and was the site used for shorebird banding.



Unit Goal: Provide a resting and feeding area for migratory birds.

Objectives: Manage for hemimarsh conditions and prevent further establishment of Purple Loosestrife.

Strategies:

Management Strategy Constraints:

Unit: MS 5

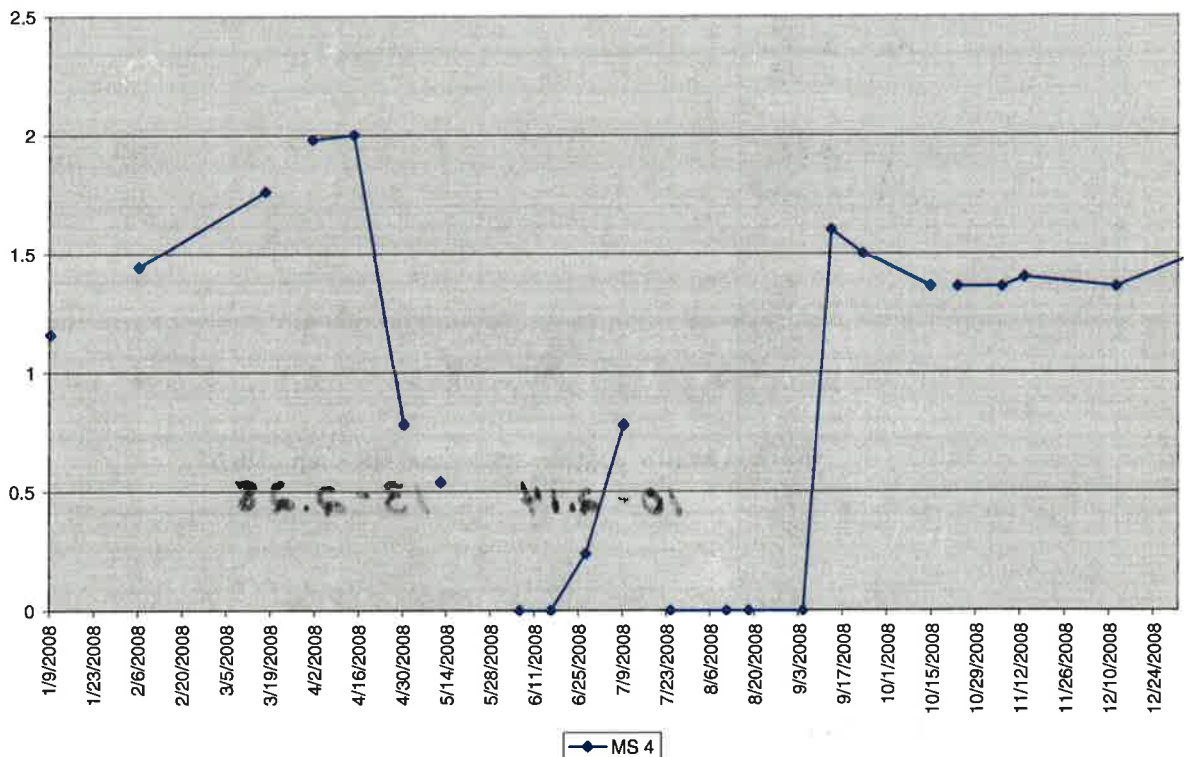
Water level guide	2009 Date	Actual Water level	Notes
	1/5	1.64	
	2/12	2.20	
	Mar. 4	2.06	
	9	2.20	
	18	2.34	
? 2.7-3.0	30	2.3	
	Apr. 8	2.3	
	21	2.42	
	27	2.28	
	May 6	2.32	
	19	2.26	
	June 1	2.14	
	9	2.08	
	19	2.08	Dirty meter
	26	2.14	
	July 7	1.94?	Dirty - putting H ₂ O from MS.3 into MS.5
	8	2.04	10-2.14 13-2.28
	17	2.32	
2.3	28	2.32	
	Aug. 4	2.28	ms.5 closed to ms ditch
	10	2.24	
	21	2.12?	Dirty
	31	2.1	
	Sept. 4	2.06?	Dirty
	15	1.94?	Dirty
	Oct. 20	1.82?	1,500 ducks - Mall, Gadwa // Pintail, GWT, Black, BWT (Wigeon)
1.7	27	1.76	+ 500 > 2,000? 3,000?
	12/7	2.0	ice

Unit: MS4

Acres: 112

2008 Activity: In late April it was discovered that someone had opened the NE screw/flap gate and threw the wheel to the structure into the wetland. Most of the water in the unit was released into Veler ditch. It was then decided that it would be best to manage for spring shorebird habitat and additional water was removed. This also benefitted construction goals for the 4/5 dike. August 4th the unit was completely dry and areas of reed canary grass & flowering rush along the west side were disked under. Areas of green up were redisked 2 weeks later. September 6th, the unit was reflooded. Millet responded well to the drawdown in undisked areas and the unit received excellent bird use in disked and undisked areas. Disked areas were higher in elevation and had less than 4" water. Disked areas were used as loafing areas for mallards, black ducks, shovlers, teal and pintail.

MS 4



Unit Goal: Provide a nesting and feeding area for migratory birds as well as brood habitat.

Objectives: Repair east dike/road.

Strategies: Maintain high water levels to combat R. Canary grass.

Management Strategy Constraints:

Unit: MS 4

Water level guide	2009 Date	Actual Water level	Notes
	1/5	1.58	
	2/12	1.96	
2.5	Mar. 4	1.70	Evaluate water – may need more (2.5 might be too high for S. site)
	9	1.90	
	18	1.96	
	30	1.86	
	Apr. 8	1.94	
	21	2.02	27-1.90
	May 4	1.70	(leaking into MS ditch)
	7	1.64	
	19	1.62	
	June 1	1.52	
	9	1.48	
	19	1.41	lots of F.R. & R.C.
	26	1.48	
	July 17	1.11	
	28	0.98	
	Aug. 4	0.90	
	16	0.62	
	21	0	still H ₂ O but not reaching meter
	Sept.		
	Oct.		
1.3-1.5	27	0.280 1.80	
	12/7	1.96	
	12/18	1.94	

OLD NEW STAFF
1.94- 74.52

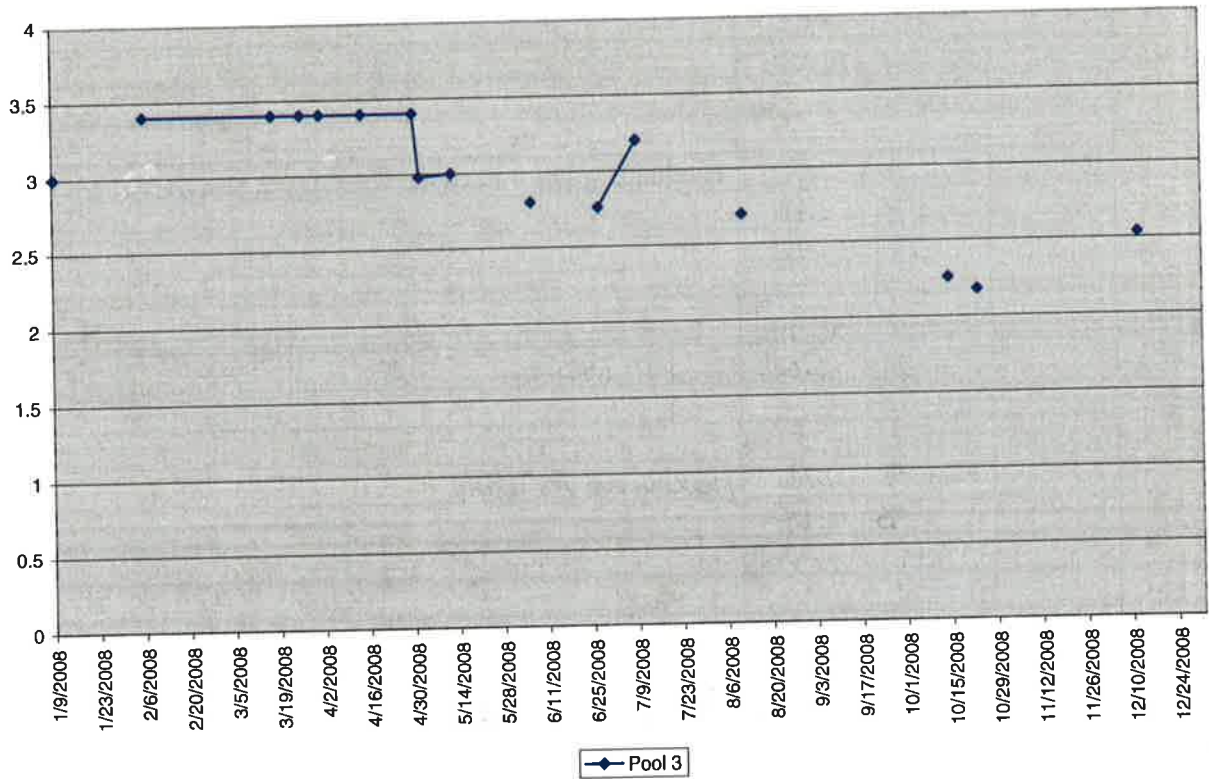
Shoot gauge
Reading & set
a bench mark!

Unit: Pool 3

Acres: 240

2008 Activity: High water was let out in April.

Pool 3



Unit Goals: The primary objective of this unit is to provide food resources and resting cover for migratory waterfowl, waterbirds, nesting Bald Eagles and other wetland animals. In addition water levels are managed to encourage native wetland plants and discourage exotic invasive species.

Objectives: Manage for hemi marsh conditions.

Strategies: Conduct winter burn to remove leaf litter and make areas more accessible to migratory birds. A burn will also make spraying invasives more effective by increasing spray contact. Maintain high water levels so that the west end has deeper water. Realize that evapotranspiration could decrease spring water levels one foot by October.

Management Strategy Constraints:

Unit: Pool 3

Water level guide	2009 Date	Actual Water level	Notes
	Mar. 4	3.24	Trapper Mays thought we could lose 4" & still manage
	9	3.30	dust at top of gauge
	20	3:30?	" " opened to C.C. 3" Ham
	26	3.30	30 3.18
	Apr. 4/1	3.11	
	4/8	3.02 3.02	
	27	3.04	
3-33	May 19	2.98	
	June 1	2.82	
	9	2.76	
	19	2.60	
	July 17	2.33	
	28	2.22	
	Aug. 10	2.09	
	21	1.92	
	Sept. 15	1.74	Fire? West half dry/mud
	Oct. 20	1.60	100 ducks - (C.C. 100 ducks)
	27	1.60	
	12/7	1.58	ice
	12/19	1.63	

raffails on west end of rats

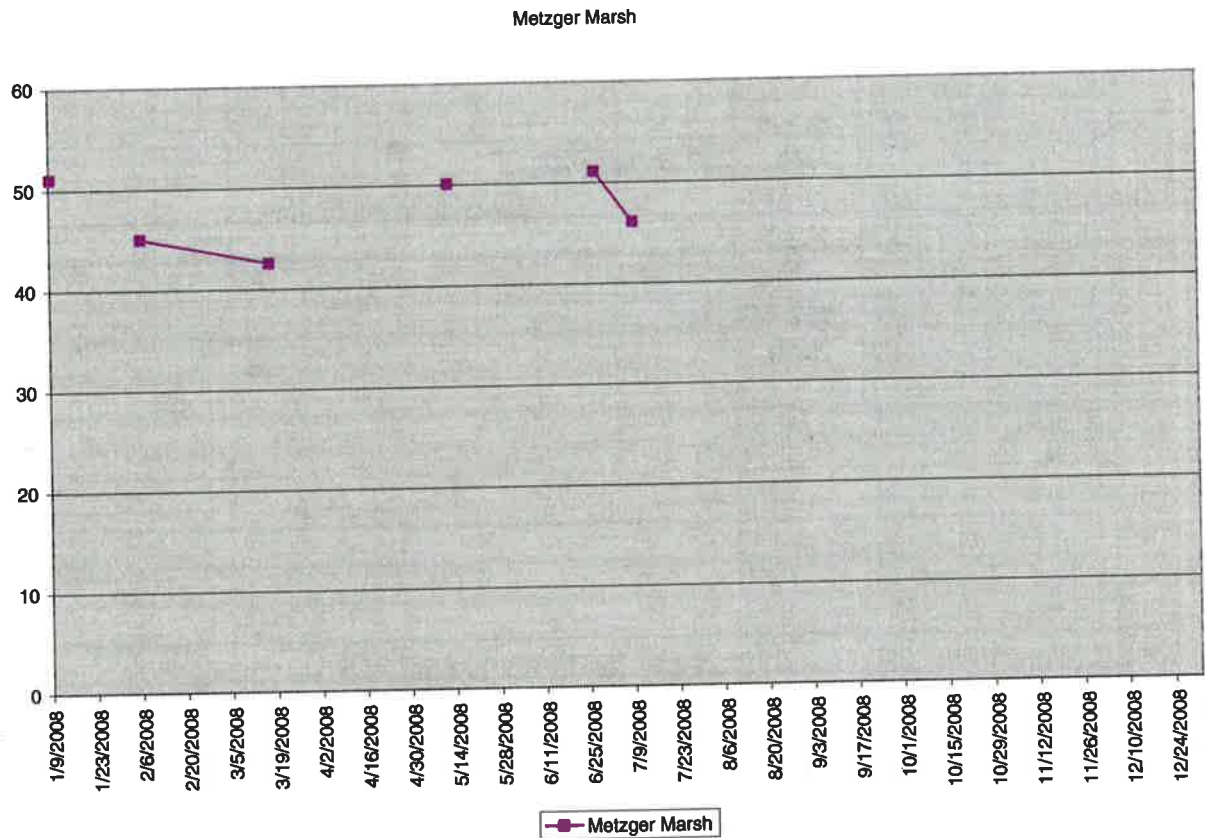
OLD - NEW STAFF
1.63 72.20

Unit: Metzger Marsh

Acres:

2008 Activity: The gates were open in April for atleast 1 week.

For chart, remember higher water level numbers, mean lower water levels. Water is measured with a tape measure from waters surface to top of east lower platform.



Unit Goal:

Objectives:

Strategies: Allow fish passage after trapping season and as soon as ice thaw allows.
Close gates by June 1.

Management Strategy Constraints:

Measure from waters surface to top of lower platform on unit side. Maintain full pool for control of invasives.

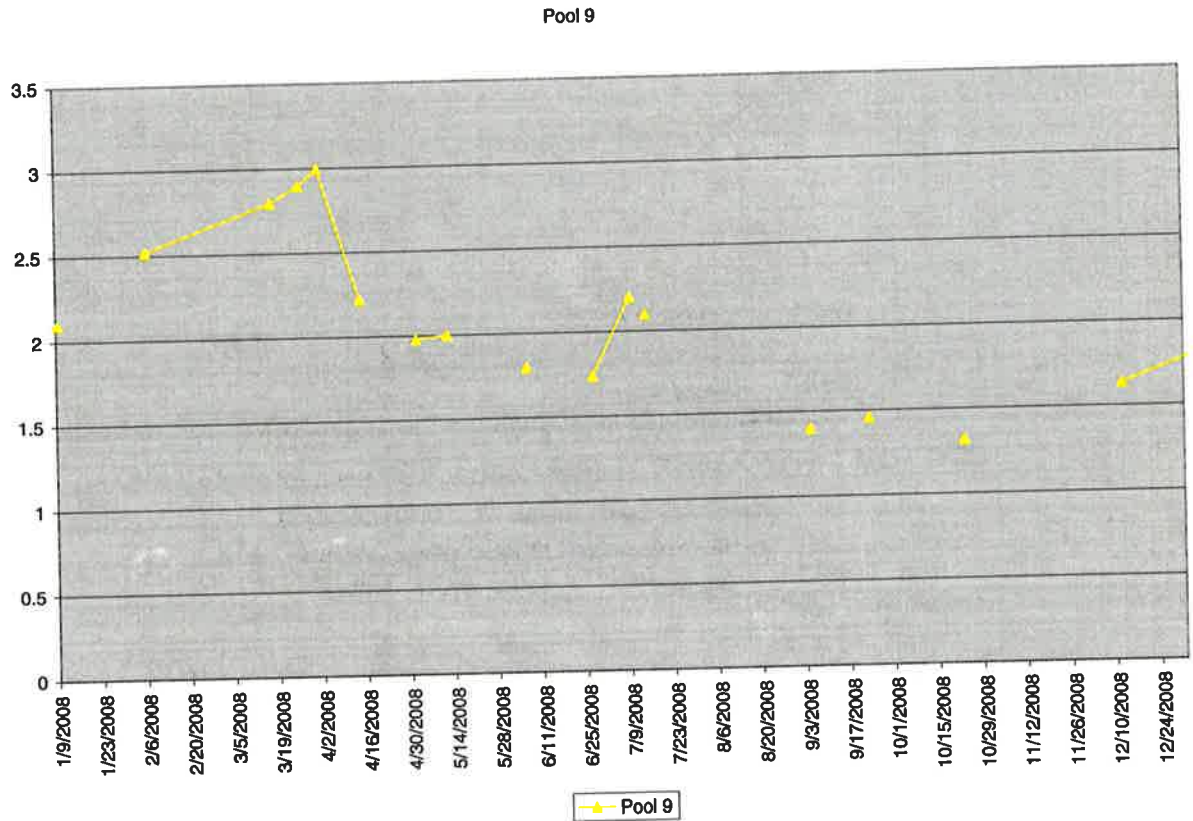
Measure from waters surface to top of lower platform on unit side. Maintain full pool for control of invasives.

[illegible]

Unit: Pool 9 East

Acres: 77

2008 Activity:



Unit Goals Provide resting and foraging habitat for migratory birds.

Objectives: Manage for hemi marsh conditions.

Strategies: Maintain full pool.

Management Strategy Constraints:

Unit: Pool 9 east

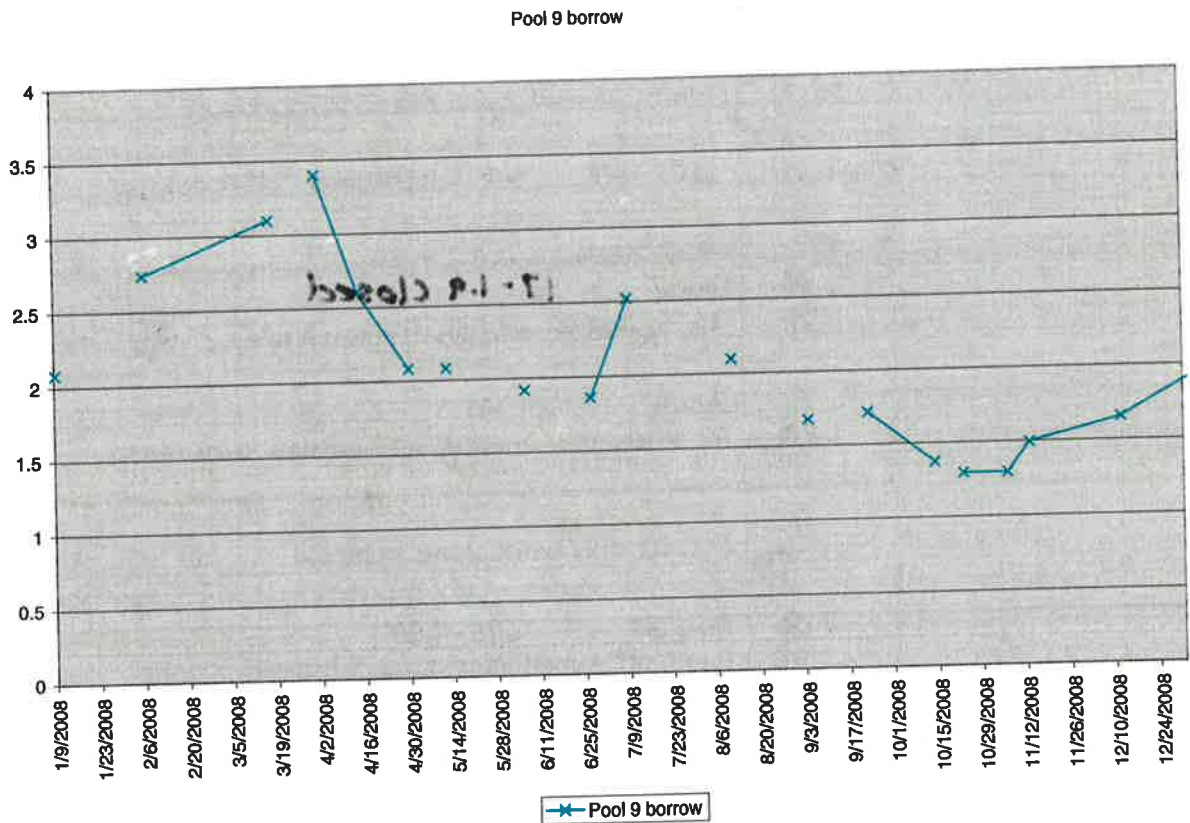
Water level guide	2009 Date	Actual Water level	Notes
2.2-2.5	Mar. 4	2.3	(White-winged eagle MS 3 NE corner)
	12	2.64	
	18	2.60	20-2.4 22-Closed 2.2 - Great duck use
	30	2.2	
	Apr. 8	2.2	looks good 4/8 - 2.28
	15	2.30	Opened 17-1.9 closed
	27	1.94	28-6 opened for d.d. (dike work on S side) 30-1.60 opened
	May 1	1.48	Closed 3-Opened
	6	1.28	2" or less over most of unit (excluding borrow area)
	19	1.08	
	June 1	0.96	D.D for dike work along Veler Rd.
	9	1.42	Pumping up starting 06108 @
	12	2.00	Pump off 6/15-1.98
	19	1.98	Pump up immediately after construction done
	July 17	1.72	
	28	1.64	
	Aug. 10	1.68	grass is high hard to see #s
	21	1.4	
	31	1.4	
	Sept. 16	1.26	
	Oct. 20	1.22	-300 ducks - GWT, Mall, Pintail, 500g
	27	1.22	
	10/7	1.24	ice
	12/18	1.32	"

OLD NEW STAFF
1.32 - 73.62

Unit: Pool 9 borrow area

Acres: 38

2008 Activity: High water was taken out in the January and March. Water was added in July.



Unit Goals: Provide habitat for waterfowl, wading birds, and shorebirds. Provide public use waterfowl hunting opportunities.

Objectives: Obtain 19 acres of deep to shallow submergent vegetation and 19 acres of deep to shallow emergent vegetation. Control Eurasian watermilfoil. Maintain 3 water blinds for waterfowl hunting season.

Strategies: a minimum of 1.3 needed to provide adequate hunting access in fall. Draw down briefly and quickly reflood for dike work on south side.

Management Strategy Constraints:

Unit: Pool 9 borrow area - Last draw down 2005, Complete by May 9.
 Reflooded Sept. 7 thru Oct 18. (clogging issues)

Water level guide	2009 Date	Actual Water level	Notes
	Mar. 4	2.60	
	11	3.00	
2.0	18	3.00	Opened to Veler ditch. 7" 20-2.64 23-2.32? windy
	26	2.30	Closed to 3"; Allow for a slower d.d., 30-2.1 (2.12?)
	Apr. 1	2.12	
	8	2.0	→ looks good
	15	2.4	Lake high 17-2.30 21-2.44 23-2.26
	27	2.08	28-2.1 closed
2.0	May 7	2.10	
Mud	19	2.08	
	June 1	1.99	
	9	1.90	
	15	1.84	
	19	1.82	
	July 17	1.55	
	28	1.48	
Reflood 1.5			
	Aug. 4	1.40	Opened to C.C. ditch 7-1.64
	12	1.84	Closed to C.C.
	17	1.70	
	21	1.74	31- 1.7 1.7
	Sept. 22	1.54	
	28	1.50	Open to C.C. in AM. Closed @ 4pm
0.8-1.0	Oct. 7	1.42	Opened to C.C. in A.M. closed in P.M.
	20	1.48	
	27	1.50	
	12/7	1.52	
	12/18	1.62	

Unit can be late level in Spring!

OLD NEW STAFF
 1.62 - 71.88

15-2-51

DARBY

Unit: **Pump Operations & Pump Ditch settings**

Water level guide	Date 2009	Actual Water level	Notes
	2/13		Ditch Open to lake
	Mar.		
	Apr.		
	May		
	June		
	July		
	Aug.		
	Sept.		
	Oct. 6		1 Pump turned on for Dick C. - Pumping ditch up.
	8		Pump OFF B/C of long weekend.
	13		Pump turned on for Churned.
	16		Pump OFF
	11/23		Pump on. 9:30 AM. Flap closed. Filling P1 & P3 11/27 - Pump OFF?
	12/22		Waznick called, wants high H2O off

1 pump today

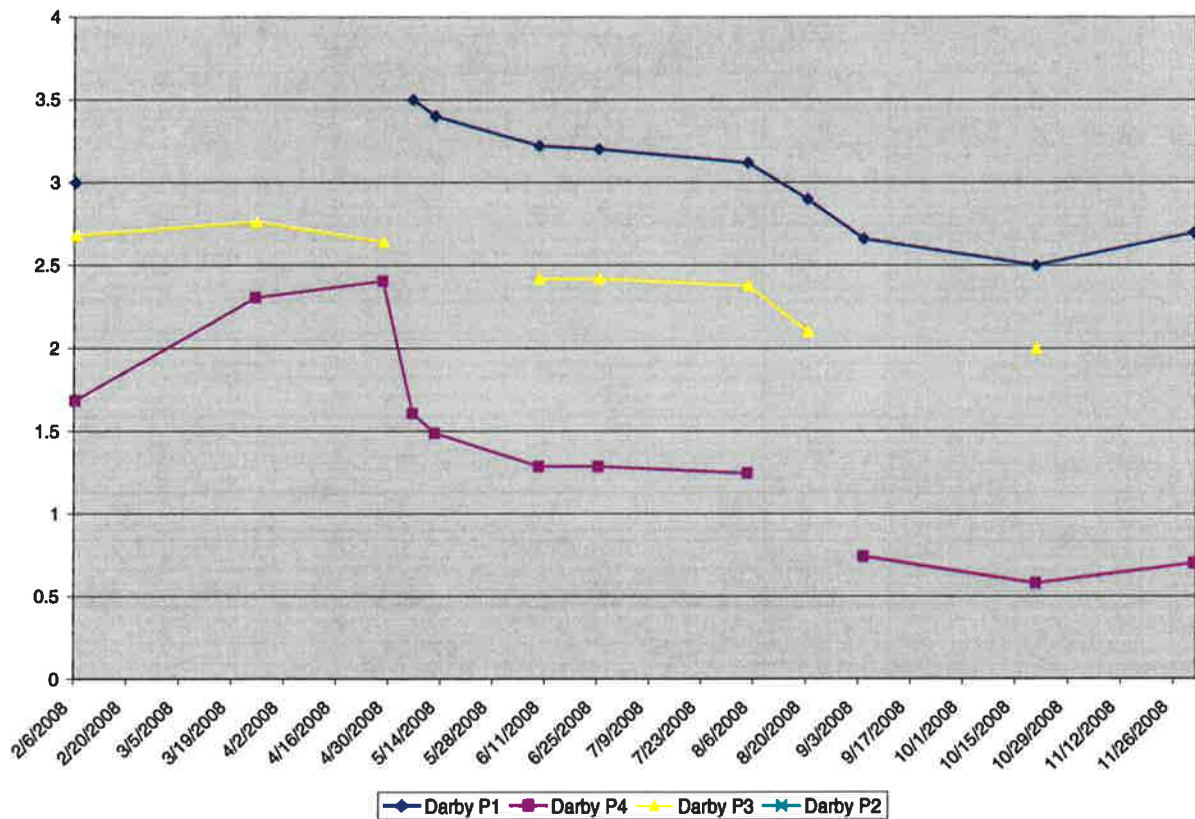
686843753 10/15 meter.

Darby

Unit: Pool 1

Acres: 200

2008 Activity: High water was released in May for a week.



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Provide a hemi marsh rich in invertebrates and decrease P. Loosestrife infestations.

Strategies: Manage unit at full pool

Management Strategy Constraints:

Unit: Darby Pool 1

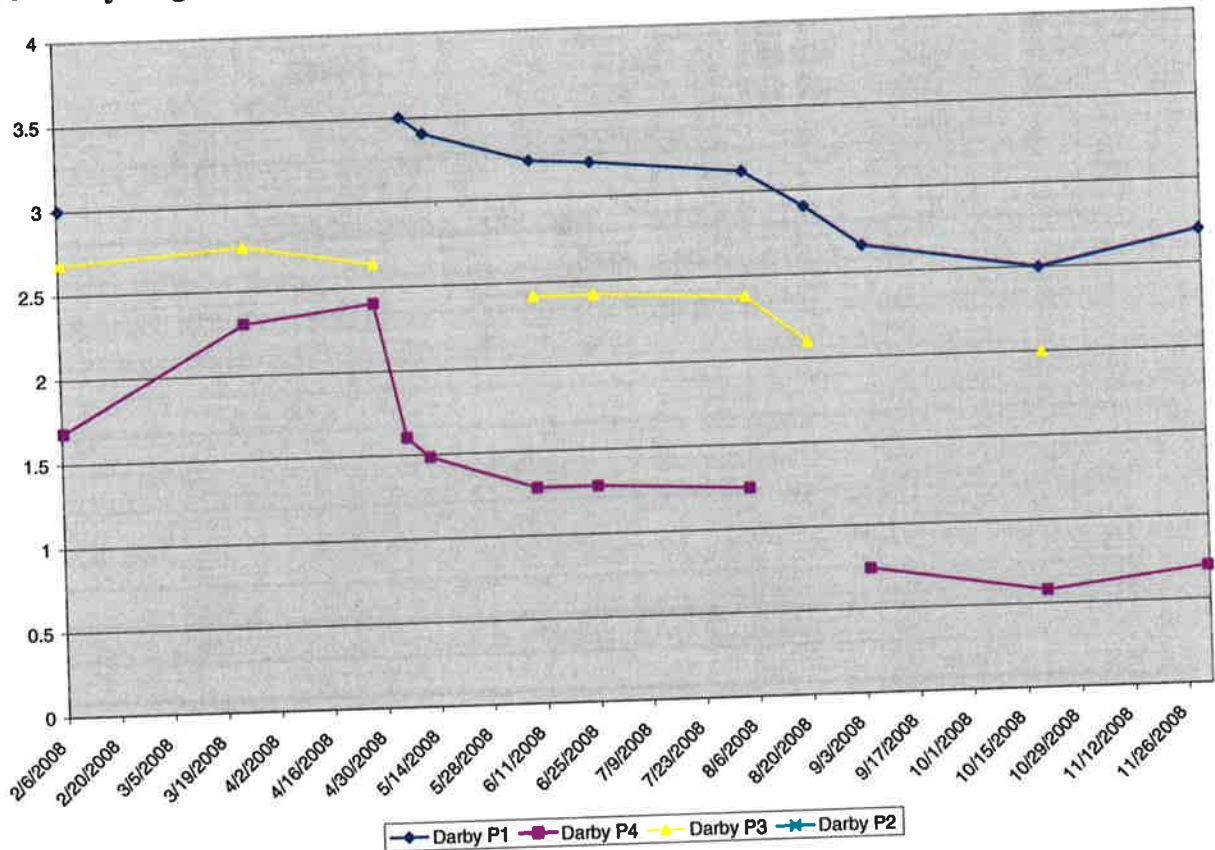
Maintain full pool. Significant amount of mudflats exposed at 1.7

Water level guide	Date 2009	Actual Water level	Notes
	2/13	73.4	2" From top of board
	Mar. 11	73.4	opened 5" over the gauge + board
	18	3.18	Closed 2pm
	31	3.14	
	Apr. 16	3.22	
	May 11	3.14	
3.4			
	June 3	3.08	
	15	2.92	
	25	2.92	
	July 10	2.78	
	Aug. 10	2.55	
	21	2.44	
	8/26	2.40	
	Sept.		
	Oct. 8	2.10	
	13	2.14	
	21	2.10	
	11/3	2.22	2.14
2.4?	11/23	2.08	→ Pump on. 11/24 2.10-11/24 2.14 11/25-2.16
	11/27	2.26	11/30 2.20 11/30-2.24
	12/23	2.34	

Unit: Pool 4

Acres: 170

2008 Activity: High water released in May.



Unit Goal: Provide marsh habitat for migratory birds.

Objectives: manage for plant diversity and hemi marsh conditions.

Strategies:

Management Strategy Constraints: Unit has a history of purple loosestrife infestations. Particularly along the SE corner.

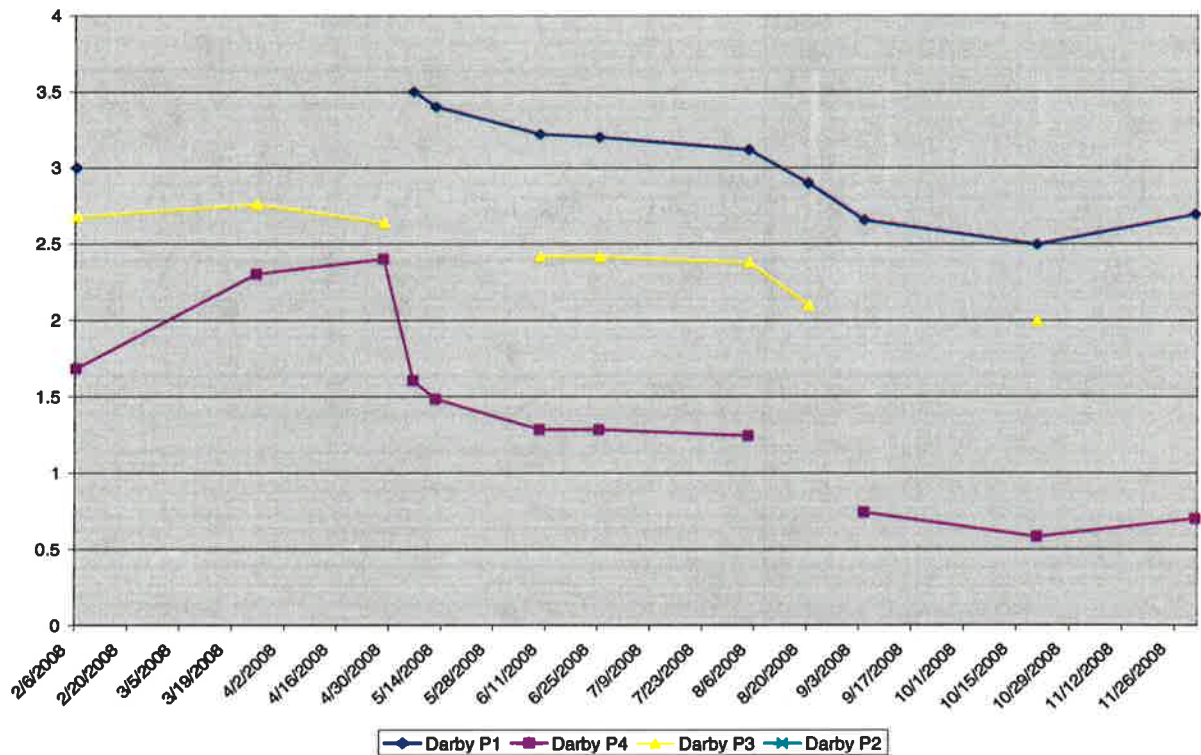
Unit: Darby Pool 4

Water level guide	Date 2009	Actual Water level	Notes
	2/13	1.46	
	Mar. 11	1.80	Opened 4-5"
	16	1.5	Closed 3/18-1.5
	31	1.48	
	Apr. 16	1.57	
	May 11	1.52	
1.5			
	June 3	1.54	
	15	1.42	
	26	1.37	
	July 10	1.19	
	Aug. 10	1.02	
	21	.94	
	26	0.80	
	Sept.		
	Oct. 8	0.58	
	21	0.56	
	11/3	0.60	
	11/23, 11/24	0.54	
	11/30	0.60	
	12/23	0.76	ice

Unit: Pool 3

Acres: 25

2008 Activity: No active management.



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Provide a combination of both annual and perennial vegetation in a hemimarsh.

Strategies:

Management Strategy Constraints:

Unit: Darby Pool 3

Full pool (2.64)

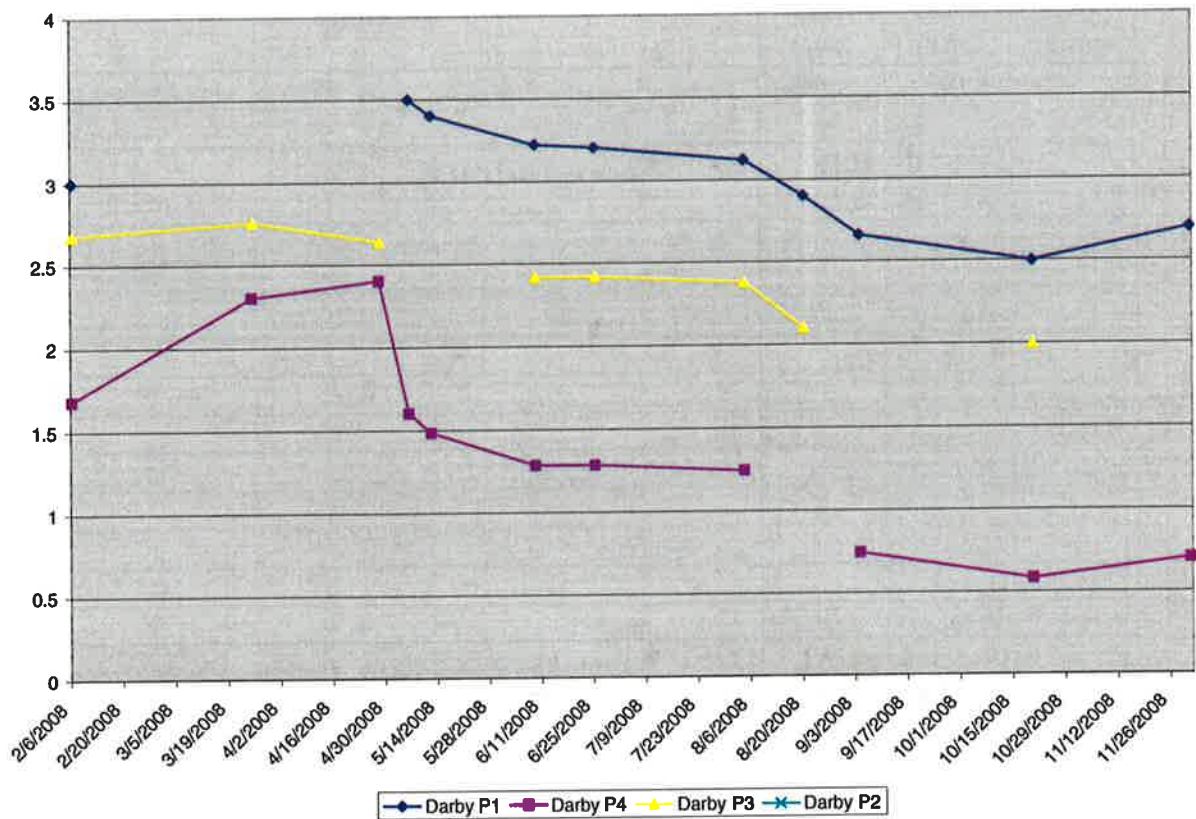
2.56

Water level guide	Date 2009	Actual Water level	Notes
	2/13	3.05	Flowing over boards, but this seems high - gauge may have moved.
	Mar. 11	3.16	58" Flowing overboards
	18	3.0	
	31	2.94	Not flowing over boards, water flowing out slowly over low spot on South dike
	Apr. 16	2.98	-1 board pulled- 5" (may have slid down in box over winter)
2.5-2.6			
	May 11	2.56	
	June 3	2.55	
	15	2.38?	Dirty - lost lots of cattail. Mostly water smartweed
	26	2.37	Dirty meter
	July 10	2.26	
	Aug. 10	2.06	
	21	1.95	
	26	1.90	
	Sept.		
	Oct. 8	1.58	Very shallow - some mudflats showing. >4" H ₂ O
	21	1.64	
	11/3	1.66	
	11/23	1.64	50 ducks. Pulled 2 boards up. Filling.
	11/24	1.78	11/25 1.86 11/27- 2.0 closed boards
	11/30	2.0	
	12/23	2.16	

Unit: Pool 2

Acres: 25

2008 Activity: No active management



Unit Goal: Provide resting and foraging habitat for migratory birds.

Objectives: Manage for hemi marsh conditions

Strategies: Manage unit at full pool. Install new water gauge.

Management Strategy Constraints:

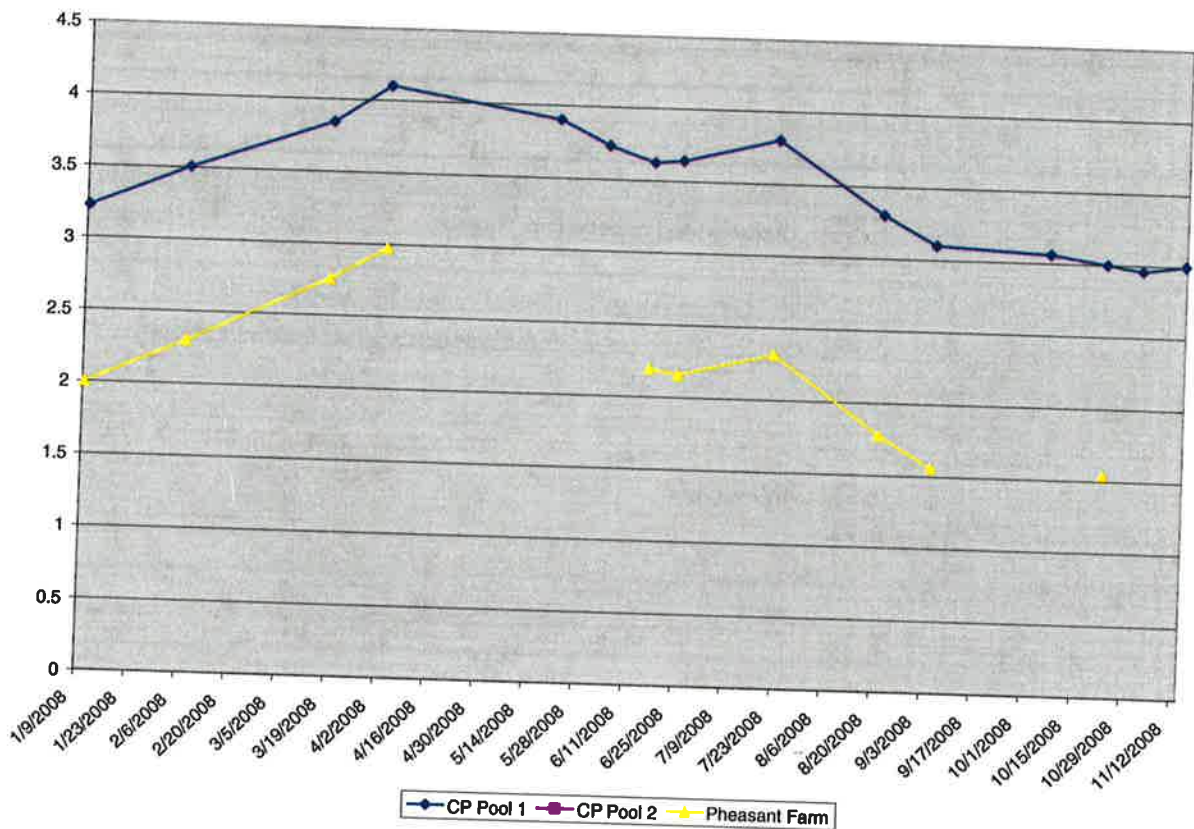
Unit: Darby Pool 2
Maintain full pool.

Measure inside box, unit side, to top of structure

Water level guide	Date 2009	Actual Water level	Notes
	Mar. 11	50 1/2"	Added 1 board (4") 1" below top of board.
	18	51 1/2"	
	30	51 3/4"	
	Apr.		
	May 11	51 3/8"	
	June 3	52 1/4"	
	July 10	56"	
	Aug. 10	56.5	
	21	60"	
	Sept.		
	Oct. 8	64 1/2"	
	11/24	64 1/2"	300 ducks
	11/30	64 1/2"	
	12/23	63"	

C.P.

Cedar Point
Unit: Pool 1
Acres: 1,460
2008 Activity: No active management



Unit Goal: Provide nesting, foraging, and resting habitat for a variety of migratory birds and wildlife. To maintain populations of rare and endangered plants.

Objectives: Maintain full pool.

Strategies:

Management Strategy Constraints:

Unit: Cedar Point Pool 1

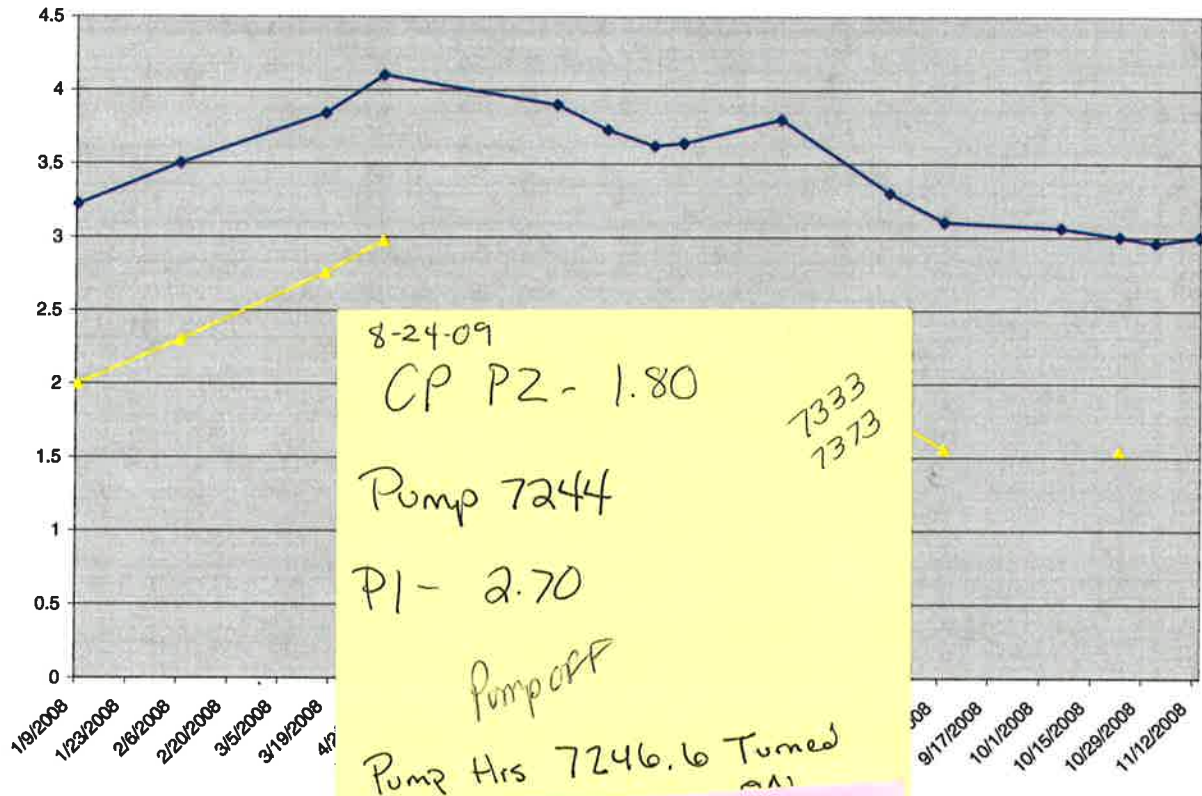
Water level guide	Date 2009	Actual Water level	Notes
3.5	2/27	3.80	
	Mar. 13	4.10	
	18	4.07	Opened gate 12" to lake on West Side 20-4.0 opened further - 18"
	23	3.90	Strong NE wind - opened to 1/2 way 26-3.74 closed gate to 16"
	30	3.57	
	Apr. 1	3.53	Closed, still some minor flow
	9	3.52	" " 29" @ SE structure (H ₂ O to middle brace)
	16	3.57	
	23	3.57	29" @ SE structure (H ₂ O to middle brace N side)
	May 1	3.50	
	6	3.50	No wind
	15	3.52	
	June 1	3.28	meter was dirty / hard to read
	2	3.26	
	17	3.1? 3.08?	Dirty
	July 7	3.02	
	Aug. 3		6782 meter - Pump 2 - 8/4 - Pump on
	7	2.70	6857 Dirty H ₂ O gauge. Holes in pipe to lake on screw / Pump 3
	12	2.66	41" @ SE struct
	17	2.64	20-40 1/2" 7193 meter 2.70 31-7373 - 31-2.8
	Sept. 18	2.70	
	24	2.68	Pump 01 F 7757
	Oct. 19	2.56	
	Nov. 12	2.0?	log found stuck in structure - H ₂ O flowing out.
	12/2	2.0?	43"

2010 Plans - Begin spring d.d. after thaw + complete by May 31st

Unit: Pool 2

Acres: 135

2008 Activity: Water was taken out of the borrow area for dike work in mid-April, a coffer dam was installed between the borrow area and the unit. The unit was at full pool in April and 1500 waterfowl were observed on the 4/2/08. The borrow dike was seeded in late June and reseeded in August. Pool 2 water levels were lower than ideal in late October.



Unit Goal:

Objectives:

Strategies: Maintain full pool

Management Strategy Cons

Unit: Cedar Point Pool 2

Unit: Cedar Point Pool 2

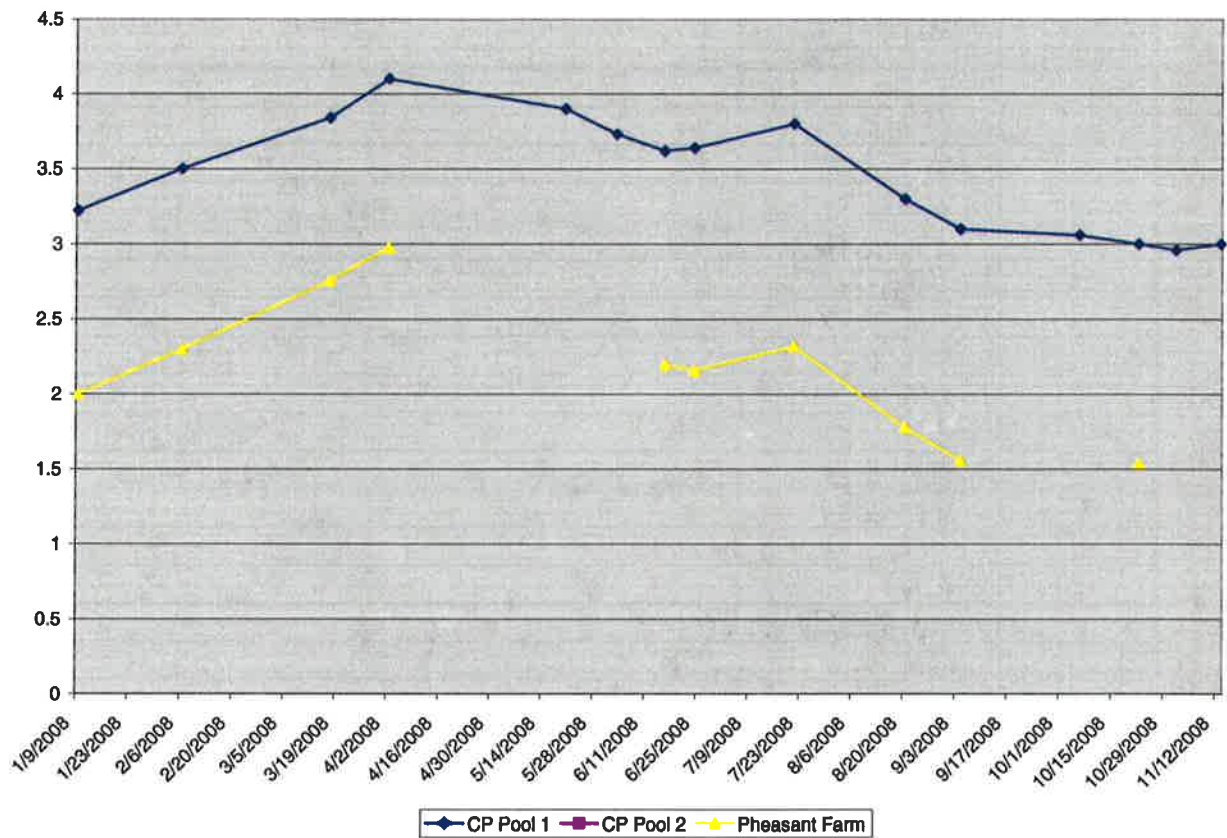
Keep water as high as possible, without flooding neighbor's woods.

Water level guide	Date 2009	Actual Water level	Notes
	2/27		Borrow flap not working - Borrow higher than unit. Unit H ₂ O
	Mar. 13	2.98	looks good. R.H.
	18	2.96	20-71" (Gate to lake)
	26	2.94	
	30	2.94	
	Apr. 9	3.00	Opened Pool 2 to Pool 1 to get high water off of Gravel
Opened	23	3.10	38 1/4" - water surface to middle brace on unit side in middle
	27	2.7-2.74	windy 39 3/8" of brace - bottom of "L" bracket
	May 1	2.80	39" Equalized at P1
	7	2.68	41"
	11	2.68	Closed to P1
	15	2.80	41 1/4"
	June 3	2.64	42"
	17	2.5?	Dirty
	July 7	2.4	46 3/4"
			50"
	Aug. 3		50" 10 th - 2.0? dirty?
	17	1.70?	
	31	1.88	
	Sept. 18	1.68	
	Oct.		

Unit: Pheasant Farm

Acres: 155

2008 Activity: No active management



Unit Goal:

Objectives:

Strategies: Manage for against invasives. Maintain high water levels.

Management Strategy Constraints: Gate to county drainage ditch leaks.

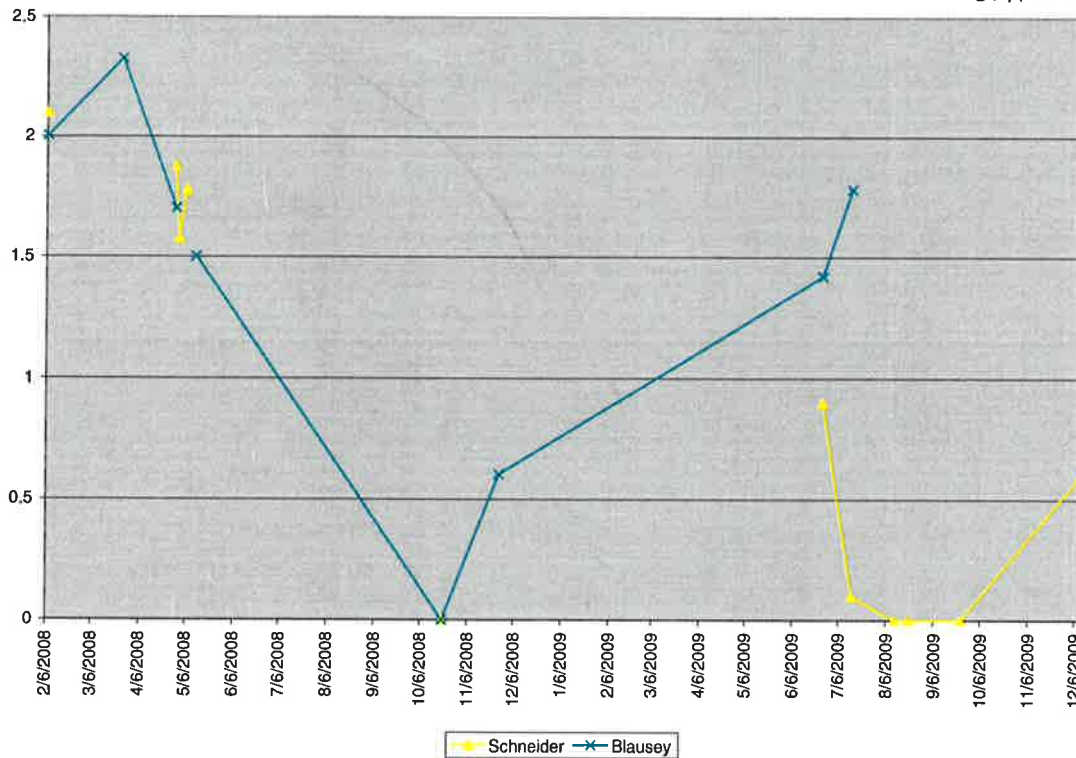
Unit: Cedar Point Pheasant Farm

Unit: Pheasant Farm - Cedar Point NWR

Water level guide	Date 2009	Actual Water level	Notes
	2/27	2.62	
	Mar. 13	2.88	
	18	2.85	
	23	2.82	26 - 2.80 West Dike (N/S part) in horrible shape
	30	2.78	
	Apr. 1	2.74	checked common dikes, no obvious leaks
3.0	16	2.71	
	23	2.73	
	May 1	2.68	
	15	2.54	
	June 3	2.80 2.28	
	July 7	2.02	
	1		
	Aug 10	1.70	
	17	1.62	
	Sept.	2.4	1.48
	Oct.		
1.5			
	12/2	1.56	

Satellite
Property

Neighbor to East:
Rich Kaiser
cell: 419-341-1880

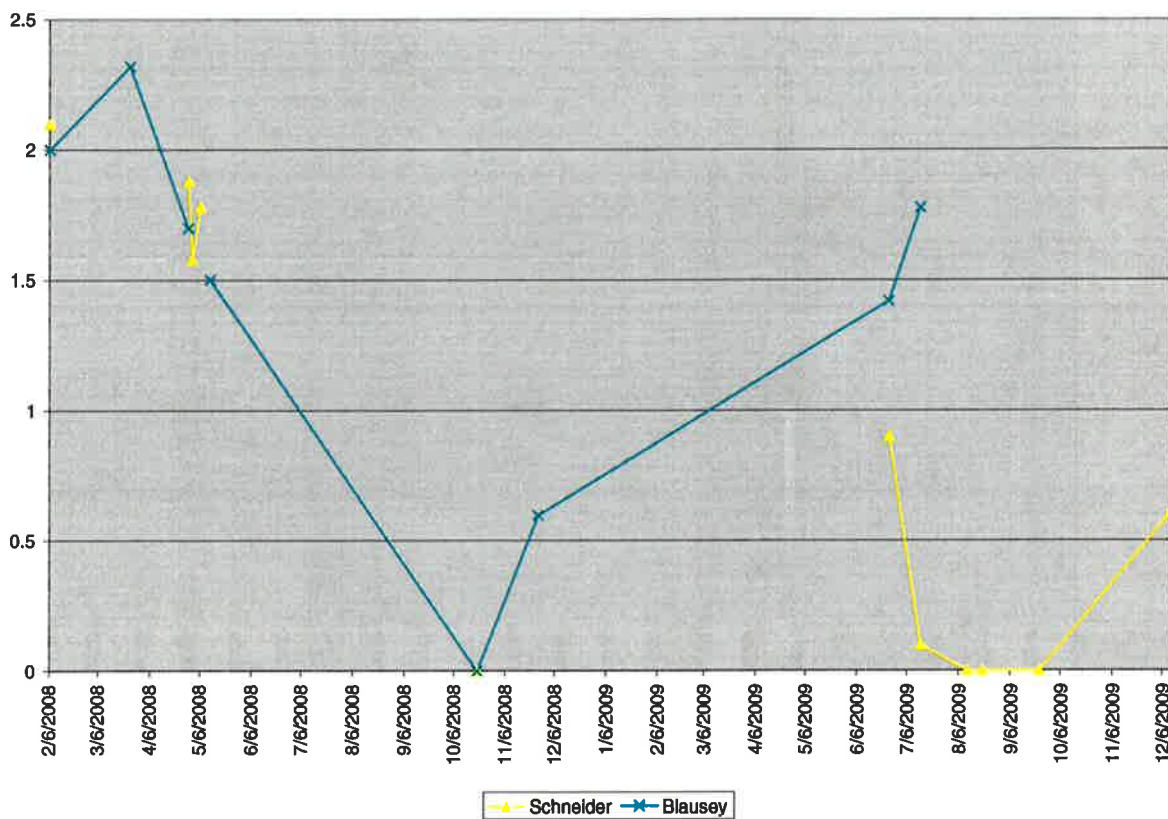


Unit: Schneider

2008 Activity: 1.5 water levels saturated neighboring land owner to the west. Landowner enrolled land in government wetland program. We agreed to draw unit down to aid in construction and treat invasives (phrag, P.L.). Due to wet spring conditions, water was not taken off until late May/early June. Pulling boards to remove water should be done carefully in the future to ensure not to overfill drainage ditch and flood neighbor to the east. Phrag areas and thick narrowleaf cattail was disked in early August. Unit was allowed to refill in September, but didn't gain water until November. Should be able to hold water at 2.5 in 2009?

Water level guide	Date 2009	Actual Water level	Notes
		2.24	
1.5-2.5	Mar 9	2.44	Check Boards! May need to add another - Flowing over board 1-2"
	3/10	2.40	changed top board w/ a bigger board. Should hold 6" more H ₂ O - 474"
	3/12	2.60	3/18 - 2.60 → 300 ducks (Mall + Pintail) in transition areas feeding
	3/30	2.36	flushed snipe
	4/22	2.34	
	6/15	1.52	
	6/26	1.78	
	8/10	0	about 3in of H ₂ O but placement of meter - dry/mud
	9/14	0	
	12/23	0.7	

3/9 - ON

Unit: **Blausey** - SE

Water level guide	Date 2009	Actual Water level		Notes
				NE side
	2/12	1.82		
	2/26	1.70	Near top of board ~ 1"	
	3/9	1.90		
	3/11	2.10	3/12 - 2.04	3/11 - 38 1/2" 4A5 Trumpeten-yellow
	3/30	1.60	Structure filled w/veg - roots	
	4/24	1.58		
	6/15	0.70	ditch higher than unit	
	8/10	0.66	MUD / hidden	
	1'			
	11/3		Dry	
	12/23	.68	Muddy / ice	
				ST.1 USID

419-321-7557

2008 Activity: Water levels weren't checked until November, and Pool 2 had mudflats. It appears as though water was as high as 2.6 from water markings on gauge. In 2007 Pool 2 high water was pumped down by plant employees in early April, perhaps this was done in 2008 as well.

2007 Levels:

November 6
 ? -(veg looks good)
 1.62 -(lots of ducks-2000-2500, good veg)
 0.18 -3000 – 3500 ducks. Beaver action
 on south side. Muskrats thick in NE corner
 and SW side, but not too bad. Veg
 recovering.

Nov 4

0
0.10

[illegible]

Tommy Call
265-0816

Diefenthaler:

2008 Activity: The unit was full pool in February. A fuse was blown and replaced in February. The unit dried up over summer during drought in August except for main channel. It was flooded again in November from rains. In 2007 July, the unit was mistakenly drawndown.

Kontz:

2008 Activity: Unit is currently open to lake levels. Hairy willowherb was found in the transition areas of the wetland. The wetland remained flooded throughout entire season (Spring-Fall)

Helle:

2008 Activity: No active management. Water was low on 11/4/08

3/11 - water across all of unit + base of hill on south East side prop. owner

4/24 - " " water in woods all the way out to the Road.

11/9 - low water - only in borrow area (Ron)

Gaeth-Kurdy:

2008 Activity: Private land owners replaced culvert with bigger size to handle flash flood conditions better. Doug issued a special use permit. Culvert drains private Ag fields. Eric also maintained subpump in ditch behind his house. This pump is very costly and should be replaced with regular pump.